

749

AGTCCGGGGG	ACCTTTTCTAG	TCGGTAGATT	GAGATTGCAA	ACAAATCTGC	ATCTACATTG	4860
AAAGCTTAAT	TTCTAATAAT	TGAAAAAATC	GAATGAAAAA	TTTCTTACCT	TCATTACACAG	4920
AGCTCGATTT	CAGAGCTCTT	TTTGCTAGCT	TATTCATACT	TTTCTGAATT	TCGAAAAAGA	4980
AATGTAAGCG	TTTGATAGAT	TTACAAAAAG	ATTGTATAAT	AGGGATAAGA	ATAGAAAAGG	5040
AGAAGTCTCA	TGGCAGTTAA	AGATTTTATG	ACCCGCAAGG	TAGTTTATAT	TAGTCCAGAT	5100
ATAACAGTAT	CTCATGCAGC	AGATTTGATG	AGAGAGCAAG	GTTTGCACCG	TCTGCCTGTT	5160
ATCGAAAATG	ATCAATTAGT	TGGTTTGGTG	ACTGAGGGAA	CCATTGCACA	AGCAAGTCCA	5220
TCTAAAGCAA	CAAGTCTTTC	TATCTATGAG	ATGAATTATC	TTCTGAATAA	GACAAAAGTA	5280
AAAGATGTCA	TGATTGCGGA	TGTTGTCACT	GTCTCAGGCT	ATGCTAGTCT	AGAAGATGCA	5340
ACTTATCTGA	TGTTGAAAAA	TAAGATTAGT	ATTCTCCCTG	TCGTAGATAA	CCATCAAGTA	5400
TACGGAGTTA	TTACTGACCG	TGACGTTTTT	CAAGCCTTTC	TTGAAATTGC	AGGTATATGGC	5460
GAAGAAGGGA	TTCTGTACG	CTTTGTTACA	GAAGATGAAG	TTGGTGTTCT	TGAAAAAATT	5520
GTTTCTTTGA	TTGTAGAAGA	AAATTTGAAT	ATCTCCCAT	CAGTCAATAT	TCCGCGTAAG	5580
GATGGTAAGG	TGATTATCGA	AGTGCAAATC	GATGGATCAA	TTGATTTACC	AGCCTTGAAA	5640
GAAAAATTTG	AAGCAAATGG	TATTCAAGTG	GAAGAAATCG	CTCGCACTTC	AGCAAAAGTC	5700
TTGTAAGAAG	GGAAGCCCAA	AGGCTTCTTT	TTTCATGAAA	AGGGGATTAG	AGCAAAAGAT	5760
GGAAAGAAAT	GATAAAATAT	GCTATAATGA	AATAATGTAA	AAAAGGAGTA	TTTATGGACA	5820
TTTCAGTAAT	TCGTCAGAAA	ATTGACGCAA	ATCGTGAAAA	ATTAGCTTCT	TTCAGGGGGT	5880
CTCTTTGACC	TCGAAGGGCT	AGAGGAAGAG	ATTGCCATCT	TGAAAAACAA	GATGACAGAA	5940
CCTGATTTTT	GGAACGATAA	TATTGCGGCC	CAAAAAACGT	CGCAAGAATT	AAATGAATTA	6000
AAAAACACTT	ACAATACCTT	CCATAAGATG	GAAGAGTTGC	AGGATGAAGT	CGAAATTTTA	6060
TTGGATTTTT	TGGCTGAAGA	CGAGTCAGTG	CATGATGAAC	TGGTAGCGCA	GTTAGCCGAA	6120
CTTGATAAGA	TAATGACCAG	CTACGAGATG	ACTCTACTCT	TGTCAGAACC	TTATGACCAC	6180
AACAATGCCA	TCTTGGAAT	CCATCCAGGT	TCTGGTGGTA	CTGAGGCGCA	GGACTGGGGT	6240
GATATGTTGC	TTCTGATGTA	TACTCGTTAT	GGTAATGCTA	AAGGCTTTAA	AGTGGAAGTG	6300
TTGGATTACC	AAGCAGGTGA	TGAGGCTGGT	ATTAAGTCGG	TAACTTTATC	ATTTGAAGGG	6360
CCTAATGCCT	ATGGTCTCCT	CAAGTCAGAA	ATGGGTGTTT	ACCGCTTAGT	GCGAATCTCA	6420
CCATTTGACT	CTGCCAAACG	TCGCCATACC	TCTTTCACAT	CTGTAGAAGT	GATGCCAGAA	6480
TTGGATGATA	CTATTGAAGT	GGAAATCCGT	GAAGATGATA	TCAAGATGGA	TACCTTCCGT	6540

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TCAGGTGGTG	CCGGTGGACA	AAACGTCAAT	AAGGTTTCAA	CAGGTGTACG	TTTAACCCAC	6600
ATTCCAACGTG	GAATTGTTGT	CCAATCAACA	GATAGTCGTA	CCCAGTATGG	AAATAGAGAT	6660
CGTGCCATGA	AGATGTTGCA	GGCTAAGCTC	TATCAAATGG	AGCAAGATAA	GAAGGCTGCG	6720
GAGGTAGATT	CTCTCAAAGG	TGAGAAAAAG	GAGATCACTT	GGGGAAGCCA	AATCCGTTCT	6780
TATGTCTTCA	CGCCTTATAC	TATGGTAAAA	GATCACCGAA	CTAGCTTTGA	GGTTGCTCAG	6840
GATAGATAAGG	TTATGGATGG	GGACCTAGAT	GGTTTATATCG	ATGCTTATCT	CAAGTGGCGA	6900
ATTAGCTAAG	ATAGAAAGGA	ACTCACATGT	CAATTATTGA	AATGAGAGAT	GTCGTTAAAA	6960
AATACGACAA	CGGAACAAC	GCTCTACGCG	GTGTTTCGGT	TAGCGTTCAA	CCGGGGGAAT	7020
TTGCTTACAT	CGTAGGACCT	TCAGGAGCAG	GGAAGTCAAC	TTTTATTTCGT	TCTCTGTATC	7080
GTGAAGTAAA	AATCGATAAA	GGAAGCCTAT	CAGTTGCTGG	TTTTAATCTG	GTAAAGATCA	7140
AAAAGAAAGA	TGTCCCGCTT	CTACGTCGTA	GTGTTGGGGT	TGTCTTCCAG	GATTATAAAT	7200
TGTTACCAAA	GAAAACTGTC	TATGAAAATA	TTGCTTACGC	TATGGAAAGTA	ATCGGGGAAA	7260
ATCGCCGTAA	TATCAAAAGA	CGAGTGATGG	AAGTTTGGGA	CTTGCTTGGGA	TTGAAGCATA	7320
AGGTTCGTTT	TTTCCCAAAT	GAACCTCAG	GTGGGGAGCA	ACAGCGGATT	GCGATTGCGC	7380
GTGCAATTGT	AAATAATCCC	AAAGTATTGA	TAGCTGATGA	GCCAACAGGA	AATCTGGATC	7440
CGGATAATTC	ATGGGAAATT	ATGAATCTCT	TGGAACGGAT	TAACyTACAA	GGAACAACATA	7500
TTTGTATGGC	GACTCATAAT	AGCCAGATTG	TAAATACCTT	GCGCCACCGT	GTCATTGCCA	7560
TTGAAAATGG	CCGTGTCGTT	CGTGACGAAT	CAAAAGGAGA	GTATGGATAC	GATGATTAGT	7620
AGATTTTTTC	GCCATTTAT	TGAAGCCTTA	AAAAGTTTGA	AACGAAATGG	TTGGATGACA	7680
GATAGCTGCTG	TCAGTTCAGT	CATGATTACT	TTGACCTTGG	TGGCAATATT	TGCATCTGTT	7740
ATTTTCAATA	CAGCGAAACT	AGCTACAGAT	ATTGAAAATA	ATGTCCGTGT	AGTAGTTTAT	7800
ATCCGAAAGG	ATGTGGAAGA	TAATAGTCAG	ACAATTGAAA	AAGAAGGTCA	AACTGTTACA	7860
AATAATGACT	ACCACAAGGT	ATATGATTCT	TTGAAGAACA	TGTCTACGGT	TAAAAGTGTT	7920
ACCTTTTCAA	GTAAAGAAGA	ACAATATGAA	AAATTAACCG	AGATAATGGG	AGATAACTGG	7980
AAAATCTTTG	AAGGAGATGC	CAATCCTCTC	TATGATGCCT	ATATTGTAGA	GGCAAACACT	8040
CCAAATGATG	TAAAAACTAT	AGCCGAAGAT	GCTAAAAAAA	TTGAAGGTGT	CTCTGAGGTT	8100
CAAGATGGCG	GTGCCAATAC	AGAAAGACTC	TTCAAGTTAG	CTTCATTTAT	CCGTGTTTGG	8160
GGACTAGGGA	TTGCTGCTTT	GTAAATTTTT	ATCGCAGTTT	TCTTGATTTC	AAATACCATT	8220
CGTATTACCA	TTATTTCCCG	CAGTCGCGAA	ATTCAAATCA	TGCGCTTGGT	CGGAGCTAAA	8280
AACAGTTATA	TCCGTGGACC	GTTCTTGTTA	GAAGGAGCCT	TTATCGGTTT	ATTGGGAGCT	8340

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ATCGCACCAT CTGTTTGGT CTTTATTGTT TATCAAATTG TTTACCAATC TGCAACAAA	8400
TCGTTGGTAG GGC AAAATCT ATCCATGATT AGTCCAGATT TATTTAGTCC GTTGATGATT	8460
CCCCTACTAT TTGTGATTGG GGT TTTTCATT GGTTCATTGG GATCAGGAAT ATCCATGCGC	8520
CGATTCTTGA AGATTTAGGT AAAATAGCTG CTTTTATGAG GAGATTGTAA AATCTCCTTT	8580
TTTGCTACAA GAGTTTGA AAAGAGATGC GCAGAAGAAA AGAGCTTCCA AAGAAGTCCC	8640
CCAGAGAAGA CTTC	8654

(2) INFORMATION FOR SEQ ID NO: 99:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 19718 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 99:

TGTCGCGTCA AAATCATTAC TATGGCTATG TATAGCCCTT ACTATGACTT GGCTAAACAC	60
GTTCGCTTTC AAATTTCTAG GCTCAGGCTG AACAGTCTC CCAGGCTGTT CACTCCCGAA	120
TGCTAAATC GTTCTTGATC GCTTTCACAT TGTACAACAT CTTAGCCGTG CTATGAGTCG	180
TGTGCATGTC CAAATCATGA ATCAGTTTCA TCGAAAATCC CATGAATACA AGGCTATCAA	240
GCGCTACTGG AAAC TCATTC AACAGGATAG CCGTAAACTG AGTGATAAGC GATTTTATCG	300
CCCTACTTTT CGCATGCACT TAACAAATAA AGAAATTCCTT GACAAGATTT TAAGCTATTC	360
AGAAGACTTG AAACACCACT ATCAGATCTA TCAACTCTTA CTTTTTCACT TTCAGAACAA	420
AGACCCTGAG AAATTTTTCG GACTCATTGA GGACAATCTG AAGCAGGTTC ATCCTCTTTT	480
TCAGACTGTC TTTAAACCTT TTCTCAAAGA TAAAGAAAAG ATTATCAACG CCCTTCAACT	540
ACACTATTCT AATGCCAAAC TGAAGCGAC CAATAATCTC ATCAAACCTTA TCAAGCGCAA	600
TGCCTTTGGT TTTTCGAACT TTGAAAACCT CAAAAAACGG ATTTTATATCG CTTTGAACAT	660
CAAAAAAGAA AGGACGAAAT TTGTCCTTTC TCGAGCTTAG CTGACTTCAA CCCACTACAG	720
TTGACAAAGA GCCTAATTTT CATAAAAATTT GACATGGAAA TTATAAAACC ATTACTAGTT	780
TAGTCTCTTT TGATAACGTG CCAATTCGGC TTGGTTTCGCC CAAACATAGT GACCTGGACG	840
GATTTCTACC ATAGATGGCT TATCAGTCTC ATAGTCGTGT TGA CTGTTGGAT CGTAAACCTT	900
CAAGACCTTC TTACGTTCCA AGATTGGATC TGGGATTGGT ACCGCTGAAA GCAAGGCTTG	960
AGTATATGGG TGAATTGGAT TGTAAACAA TTCTTCTGTT TCTGCAACCT CTACAATAAC	1020

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ACCCTTGTA	ATAACTGCGA	TACGATCTGA	AATAAAGCGA	ACAACCGACA	AGTCATGGGC	1080
GATGAAGAGA	TAGGTCAGGC	CGAGCTCTTT	TTGGAATTTT	TTGAGCAAGT	TCAAGACTTG	1140
GGCACGTACA	GAAACGTCCA	AGGCTGAAAT	TGGCTCATCT	GCAATAACAA	AGTCTGGTTG	1200
CATGACCAAG	GCACGGGCAA	TACCGATACG	TTGACGTTGA	CCGCCTGAGA	ATTCATGAGG	1260
GTAACGAGTC	AAGTGCTCAG	CAAGAAGACC	TACTTCACGG	ATAATATTTT	GAAC'TTCTC	1320
TTTACGTTCT	TCTTCATCCT	TAAATAAACG	GTGATTGTAA	AGACCTTCAG	AAATAATATA	1380
ATCAACAGTC	GCACGTTTAT	TCAAACCTGC	GGCAGGGTCT	TGGAAAATCA	TCTGGATTCTG	1440
ACGAATCAAT	TCCGCAGCTT	GTTTACGCGA	TTTCTTACCA	TTAATCTTTT	GACCATCAAA	1500
AATGATATCT	CCATTACTTG	TATCATTTAG	ACCGATGATA	GCACGACCAA	TAGTTGTTTT	1560
CCCACTACCG	GACTCACCTA	CAAGCGAGAA	AGTTTCTCCC	TTGTTGATAA	AGAAGTTAGC	1620
ATTTTAAACC	GCGACAAACT	TCTTACTTCC	TTCACCGAAG	GAAATTTCTA	AATCTTTGAT	1680
TTCTACTAAT	TTTTTACAGA	TTTCCTTCCT	CCTAGTCAGC	CAGATGGGCA	AATCCCATT	1740
TTTACGCGAT	CTTATCATGG	AGATTGCAA	TCACAGCTGG	TTTTTCTACT	TTCGGAGCAT	1800
CCTCATGAAG	AAGCCAAGTT	TTAGCCCAAT	GTGTCTCTGA	TACTGAGAAT	TGAGGAGCTT	1860
TTTGTTCGAA	GTCAATCTGC	ATTGCGTAGT	CAGAACGCAA	GGCAAAAGCA	TCCCCTTTCA	1920
GGTCAGTATA	AAGTGACGGA	GGTGTTCCTG	GGATTGAGTA	AAGATCCCCCT	TTATCATCAG	1980
CAAGCTGAGG	CAAGCTAGAC	AAGAGACTCC	ATGTATATGG	ATGGCGAGGG	TCATAGAAGA	2040
CTTCCTCAAC	CGTTCCATAC	TCAACGATTT	CTCCTGCATA	CATAACCGCT	ACCTTATCCG	2100
CAATACTTGC	CACCACACCA	AGGTCGTGGG	TAATAAAGAT	TGTTGTGAAA	TGATACTCGT	2160
TTTGTAAAGA	TTTGTAGAAA	TCAATAATCT	GAGCTTGAAT	AGTTACATCC	AAGGCAGTTG	2220
TTGGCTCATC	ACAGATCAAG	ACATCAGGTC	GGCAGGCAAG	GGCAATAGCA	ATAACGATAC	2280
GTTGACGCAT	TCCTCCAGAA	TATTGGAATG	GGTATTTCAT	AAAACGTCTA	TCTGCGTCTG	2340
GAATGCCAAC	CTTATTTCATG	TAGTCAATGG	CCAATTCTTT	CGCTTCTTTA	GCTGTTTTC	2400
CTTGGTGTTT	TACAATAACT	TCTGTAATCT	GACTACCAAT	TGTTTTAATG	GGGTCCAAAC	2460
TAGTCATTGG	GTCTGGAAG	ATAGTCGCAA	TCTTAGCACC	ACGAATTTGT	TCCAATCCT	2520
TGTGAGAAGA	TAAAGCTGTC	AAGTCCTGAC	CACGGTAGTC	AATACTACCT	TGGGCAATAC	2580
GACCATTTTC	TTGAGCATA	CCTGTGAAGG	TCTTTGTCAA	AACAGATTTA	CCTGATCCTG	2640
ACTCACCTAC	CAAGGCTAAT	ACTTCTCCTT	CGACTAGTTC	AAGGGAAACG	CCGCGAATGG	2700
CTGTCAATAC	TTTGTACGA	ACGTCAAATT	CCACGACAAT	ATCGCGAGCA	GTCAAAATTA	2760
CATTTTTTTC	TTTTGTTCAT	TCTACTCCTA	TCTATGTGTA	CGTGGATCAC	TAGCATCCGC	2820



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TAAGTTTTGA CCAACTACGA AAAGGGACAA GGATACCAAG ACAAGGGTTG TCAATGGAAT	2880
CCAGAACAAG TAAGCATTGG TTGTTACGTT TTGTGAATAA TCCGAAATCA AACGACCCAA	2940
ACTTGGCACT GTAATCGGTA ATCCAAGACC GAAGAAAGAC AAGAAGGCTT CGTATGAGAT	3000
AAAGCTTGGA AGCATTTGAG TCATGGTTGT CACAATAACA GATACCAATT GAGGCATGAT	3060
ATTTTTGGCA ACAATCTTCA AGGTTGGTGT TCCCAAAGTA CGTGACGCCA AGTTGTATTC	3120
CAAGTCACGA TAGCGCAAGA TTTGCACACG GATCATGAAG GCAATACCAA TCCATGTTGT	3180
TACGCTCATG GCAAAAATCA GATTCCAGAA TCCAGCTCCG ATTGAGTAAG TCAAGACAAT	3240
AACAATCAAA AGAGGTGGGA TGTTTGAGAT GACGTTGTAA ACTTCCATCA TGACACGGTC	3300
AACTGATTTT GAAATACCCC AAATACCACC GACAAAAACA CCGATAACCA AGTTAATCAC	3360
TGTCGCAATC ACAGAAATGA GGATGGAGTT ACGAGCTCCG AACCAGACAC CGTCAAAGAG	3420
CGATTTACCG TTACTGTCAG TACCGAACCA ATGCTCCGCA TTTGGCTTGA TATAACGAAC	3480
ACTAAAGTCG TTTACCTTGC TGACATCATT GAAATCAAAC TTAGAAAACA TTGGGTAGAT	3540
GAAACTTATC AAAATGATGG CTACCAAGAT TCCCAACATG ACTACAGTTG ATTTTTTCTT	3600
CATAAATTGT TTAAACACTG ATTTCCAGTA AGAATATGCT GGCGCATCAA TAGTTTCAGA	3660
GGCAAAATCG TCACGTTTAA CAAACTGAAA TTTTCTTTTA TCGATTGTAG ACATTATTTG	3720
CCTCCTTTCT CAGTCAATTT AATACGTGGG TCAATAATAG TCATCCAAAT ATCTCCCAA	3780
AGACGTGAGA AGATAGAAAT ACATGTAAAG ATGAAGACAA GACCAACGAC CATAGAGTTA	3840
TTAGATGCTT TTACAGAGTC AATCAACATT TTACCCATAC CTGGGAAGGC GAAGACTGTT	3900
TCAGTAAGGG TTGCACCACC GATAACCCCA ATAATGGCAG CAGGAATTCC TGAAACCAGC	3960
GGAACCATGG CATTTTAAAA GATGTGTTTG TTTGAAATTT CTTTTTCAGA CAAACCTTTT	4020
GCACGAGCGA AACGAACAAA GTCTTGAGAT TGCAAGTCAA TCATGTAACG ACGAATCCAA	4080
ATGGCTGTAC CAGGAGCACC CAACAAACCA AGGATGACTG CTGGTAAAAC GTAAGAACGC	4140
CAATCTCCAG CTCCCAAGAT AGGGAATGAA TCTGGAAGGG CAATAGATGA TCCAATCAAT	4200
CGAACGATGT AAACCAAGGC AATCGTTGGA AGAGCAAGCA AGAAGGTCAA AGCCCCTGTT	4260
GAGAGGCTAT CAATCCAAGT GTTCTTGAAA CGAGCCATGG CTGAACCAAG TGGCACGGCA	4320
AGAGCATAGG CAAGAACCAA ACCAATCAAA CCAGTAATAG CAGAGCTGAC AATCATAGAT	4380
GGATATTGGT AATTACTTTC AGTCGCTGTA TAAGGATCAT CTTTCCATA GCTAGCTACT	4440
TCACGAGAGT CAGCCTGACT AGGTGACTTG TAGGTTCTTG AGTAAATATT TACAGAAGAC	4500
GTTTTCTTAC CTGTTGGGAA CTGAACCTGG GCAGTTTGG TTTGTCCTTG ACCTTGAGTA	4560

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ATAACCTGAA	GAACCTGGTGT	ATTAGCATAG	GTTGGGTAAG	AGTCACCTAA	ATTCAAGTTC	4620
ACAAAGTTTT	GATGAACAAA	TGGGAAGTGA	CTGTTAAAGT	ACAAGAGATA	TTTATGTTTA	4680
GTTCTGAAAC	CGACCAATGA	CCATCCGATA	GCTGGATCAT	TTTCAAAACG	AAGGTAGCGT	4740
TTCAAGTCTG	GATTTTCAGG	GTCTTGGATT	TTATTTGTAT	GGTCAATGTC	AATCAAGTTA	4800
GCATAGAAGT	GAAAAACACG	TTCAAAAATT	GGAATTTTAC	GAGTAGCATA	GAATTGACCA	4860
CTTTCAGTAA	ATTCTCCCAA	AGTCCAACCA	TGACCTAATT	GATTGATGTA	CTTTTCATAA	4920
ATAGCTTTAT	TGGTCGCATT	TGCTTCTACT	GTTACAGAAG	AATCCATGCT	ACTTGCCTTT	4980
TCTTGCAACT	CTTTAGTATC	GTAATACTCA	ATGTAGCCCA	TACGCTCAAA	CACAGTATTT	5040
TCATAGTTAT	CACGTTTATC	AGCCGTGTGC	GCAATTTTAT	TATAGTTAGG	ATCCTGCTTG	5100
AAAATCAATT	TTCGAGGAAC	CAAGGTATAG	ATAATCGTGT	AGGTCAAAGT	CGTTACTAAG	5160
AAAATCGAAA	CCAATGACCG	CAAAACACGC	ATAAAAATAT	ATTTTTTCAT	ATTATTTCCCT	5220
TTAAAAATCC	CAAAAGAACC	TTCTCCTCAT	GGAGAGAAAG	TTCTATTAGA	AATTATTTAC	5280
TTCACATGAC	TTGCCAATTC	TTTTTGAGCT	TTCTCATTTG	ATTCAGCTTT	TTCTTTCAAC	5340
CATTTTTTAC	GAGCTTTTTC	ATACTCTTCC	TTAGTCACCA	CTTTATCTTG	TGATTTCAAA	5400
TATTTGAAGT	AAACATCTGA	CCCCTTAGAG	CCTGTTTGCG	CAGAAGCTCC	AGTAAATGGA	5460
ACAATTCGTG	AAAGCACTGG	TGCTGCACCA	GAAGAAGCCA	TAGCAGGAAT	AAAGAGTGAA	5520
CTATCTGTCA	ACCATGCTTG	AGCCGCTGCA	TATTTTTTCAT	AACGGACATT	CAAGTCGCTT	5580
GTCTCTCTGG	CAGCTTCATC	AACTAATTTA	TCGTATTCTT	TCAAACCAAC	TTGAACTACT	5640
GAAGGGCTAT	TTGGATTATC	AAATCCTAAA	TATGTTTTTG	TAGTTTCACT	GCTAGTTGTT	5700
TTTAAATAT	CCAGGTAAGT	AGATGGGTCT	TGATAGTCTG	GCCCCCATGA	AACTCCTCCT	5760
GATACATCCC	AATCCTCAGA	TGAAGCATTG	GCAGCATAGT	AAGTAATATT	AAGGAATTCA	5820
TCACTGTGCA	TTTGTTGAAT	ATCAACAACG	ACATTTTCAA	CACCAAGAAC	TGTTTCTACA	5880
GATTGTTTAA	AGGACTGAAT	ACGAGATATG	TAGTTTTTTG	ATGCTTGGTC	TACTGGAACG	5940
TCCAGATGAA	TAGGAAACTG	AACGCCGTCT	GCTTCTAAAG	CTTTCTTAGC	TTTCGCAAAC	6000
TCTGCCCTGG	CCTTGTGAGC	ATTGAATAAA	CCATCCTGCC	CATCAGCTAA	ATTCACACCT	6060
TTCCACTCAT	CACCATAAGC	AGGAAGTTGA	GCAGCGACTA	AATCACCAAA	GGTCTTCTCA	6120
CCAGCTGAAA	CAAAGTCTGG	TTTTACAAAT	AAATTACGAA	CTGCTAAAGC	TGCTCCATCT	6180
TTACCATTGA	TTTGAGCTGA	GTAAGCTGAG	CGATCAAGAG	CAAAATTCAA	GGCTTGACGG	6240
AAATCTTTGT	TAAGCAATGC	CTTCTTAGTA	GCTACTTTCT	CTGAATCTGT	AGTTTGTAGAA	6300
GTATAGTTGT	AACTTTGGCG	ATCAATATTC	ACACCCAGAC	CAGCAATCCC	AGAGCCTGAT	6360

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TGTGTGTAAT AGATATTGTC CTTGTATTCT TCTGCAACCT TAGAATAGTT GGAGCTGGTA	6420
GGGTAAAGAC GGGCATAACT ATAAGCTCCA CTAGTGAAGT TACGCTCTAG CGACTCCTGA	6480
TCTGATCCAT CATAGTAAGC TAGATTGATA GTATCTAGGT GGACATTTTC TTTATCCCAA	6540
TATTGCTCAT TTTTACAAA CTCTACAGAA GATTTTGCAG TCAACCCCTT CAACAAGAAT	6600
GGACCATTAT AAAGCAAGGA TGTCGGATCT GTTGGTTTAG CAAAATCGCT TCCTTTTGAT	6660
GTTTCGAATT CTTCATTCAG AGGCCAGAAA ATAGAATAGG TCAACTTAGA GTTCCAGAAC	6720
GGTTCAGGCT GGTTCAAAGT GTATTGTAAC GTATAATCAT CAACCGCCTT GACACCAACT	6780
GTTGAAAAAT CTGTTGAAGT TCCTGATAGA TAATCTGCCA AGCCTTTAAC CGAATTTTCA	6840
GCTAAATACA TAGCTTCTGA TTTTATATCT GCTGCGTGT TTAACCGTT CACGAAATCT	6900
TTAGCCGTCA CCTCTGCATA TTCTTCTCCA TCAGAGGTAA ACCATTTAAC CCCTTTACGA	6960
ATCTTATAAG TGTAGGTCAA ACCATCCTTA GAGACTTCCC AATCCTCTGC AACTGCAGGA	7020
GCAAGATTAC CGTAATTATC GTTAGTGAAT AAACCATCAA TCCCATTGTA AGTCACTACT	7080
GTGTACTAT TTTTACTTGA AATCAGGTAG TCCAAGGTTT CTGGGTCTGC TGTATAAACA	7140
TAGCCATAAG CTTTAGGGGC TGATGAATCA GATGATTTTG AAGAACTGCA TGCTGCAAGT	7200
ACACCTGCTG CTAATAAAAC AAGACCTGCT GTAGCAAATA CACGATTTT TTTTATTTTC	7260
TACTCCTCTG TTTATGTGAA TTATAGATTG ACAACCATTA TATCACATTA TCCATTAAAA	7320
ATCAAACAAA TTTTCAGAAAT ATTTAGGCTT GTTGGCACAA ATTTTTCATT TTTTGTGAAT	7380
ATATGATTCA AATGTGCGTT CGAAGTGTC AAGACTACAG TGAAATAGG AAATTTGACG	7440
CAGAAACTTT GGAGTTTAGG AAGACATACA GTAAAATGAA ATACGGACGG AACAAATGTGA	7500
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TCAGTTTACT ATGTCTTTTC ACACCAACCT TATCCCGAAT TCAATTACTT TTGTGATTTA	7620
CATATATAGA TTAAGACTAT CTTTATACT TTAAAATTT TCGCTACCTT ATCCACTATA	7680
TGCTCCTCGC TATCACGTTT CTATTCATAG CCTACGATTT CACTATTGCT TTCTCTGACA	7740
ATTCTTATTT CCTGCGTCAG ACTTAAAACG ATCTATCCCC AGACCATTTT AATCCGCTAC	7800
CTCACGATAG TCAGGCTTGG GGAGCGCTAT TGTATTCACC GGTAGTGGAG CCCTACAGAG	7860
GACTTACACC TCAGATGCAC GACATGCCCA TCGTATAAAA AATCTCCTAC CCAAGGTAGA	7920
AGATTTCAAA CTTATAAAAC TTAATCCGTC ATGTCCGATA CCAACATTCG ATGCTCCAAT	7980
GGAACTATGC ACATAACTAG CAAGAAAATA AAGCTGACT GAATCCAGAA GAGAGCCAAG	8040
TCAAAAATTC CGTGCACAGC AACCCTGTG AGGAAAGATA GATAAAGGCC GATAATCGGA	8100

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CGTTTCCCCG	ACTCCTGACT	CATATCCATC	ATCAAGCGAA	CAGGAGCAAC	AGAAGACAAA	8160
ACTAATAAAA	TAGTCCCCAC	AATTCCGTAA	CTCAGAATCG	TATCAATATA	AAGACTGTGG	8220
GCATGTTTCAT	GATAAGGAGC	ATGTATCCGA	GGATAAGAGT	TCATATAGGT	CAATGGCCCT	8280
TCACCCCAAA	AAGGATTTTG	CTTAAACAAG	GCCATCCCAG	CATCCCAGAT	AGAAATGCGT	8340
TCTTCCATAG	AAGAGTCTAA	AGTACCCATT	CGAACTCCCA	AATCACTAGA	AAAGAGGAAA	8400
CTCAAACCAA	TCGCGAAGAC	CCCAATACTA	AGCCAAAAGG	CCTTCCAGTT	TTTAATAGTC	8460
GTAAAGAGAT	AGATAATTGC	TCCAGCGATA	ATAGCAGGAA	AGGCAGTTCG	ATTTTGAGTA	8520
AAGTTCAAAC	CAAAGAGATT	AACAAAGCCT	GCAATCACAC	AGAATACTTT	CAACCAATTC	8580
AACTTGGTCG	TTGTAAACAG	ATAGAAAGCA	ATCATAATAC	AGAAACAACA	AATAATTCCA	8640
TAATAATTAG	GATTAAAGAA	GGTCACTTCT	GCCCGGTTCT	GATGCCACAC	CTGCATATTG	8700
GGTGAAAGAA	AAGCATAGTT	AAATTTCTTC	ACAATTTGGA	AATGTTCTAA	ACTGGCAAAA	8760
GCAGCTGACA	AGACACTACC	AAACAAGACA	AACTGCAAAA	TCAATCGAAA	GAATTTATGG	8820
GATAAAATCG	ACTGATAGTG	CAAAAAGAAA	ATAGTAAATA	GAAACATTCC	TACTGAAGCC	8880
ACAAGACCCA	TCCAATTTTG	TGCAAGAATG	GATATAACAG	TACTATAGCT	AAGAAAAAGA	8940
AGCAGCATCG	GATGCTCCCC	CATTTTCTGA	AGAATACTTT	TCATGTCTCC	TGTAAAAATC	9000
AAACTGATAA	TATATAAACA	GAGTACAAC	ACAAAAAGAT	AAAAGGGTAA	AAAGATACTC	9060
AGGATAATTC	CCAATAAAAT	CAGCTCTTTA	CTAGACAACC	CCTTCAGCTT	TTCAATAAAG	9120
CCTATTGATT	TCAAAATGAA	TCCTTTCTCT	CCAAATCAGC	TGATTGAGAT	AATAGTAAGC	9180
TATCCTATAT	TGTACCACTT	TTTTAGCAAT	TTGAAAACAA	AGGAAACGTT	TTCCAAAATA	9240
AAAACCTTAT	TTTATCCACC	ATATCAAGGC	TTCAAAATGA	TACTTCAACT	CCATTCTCAA	9300
TTACCCGATA	AGTCTGATTT	TGCAAAATCA	TTTCTACTAC	TGCTGTTACG	GACTTATCTT	9360
TATTTTGACG	TTTGATTACA	ATGCTGTGAG	CTGTTGGTGT	CTCTATCTCA	GTAGTCCCTT	9420
CTAGATCAAA	GGCTTCTGAA	CGGTTACGGA	AAGAAAATAG	ATTGAGAAGG	GCCTTCACAA	9480
CAGGTCGTTG	CACTTCTTTT	GCTATTTCTT	CGTTGCTATA	GTAATGACGA	TTAATATTTT	9540
GACCTTCTTT	AGTTTCTTCT	AATAATTTC	AGTCATTCTT	GCCTGCTAAT	AGACCCACAT	9600
AGTAAATCTG	AGGAATACCT	GGGGCAAAAG	CTTGAATTAG	ACGAGCGAGA	AAATACTTGA	9660
CATCATCATC	TCCAAGCGCT	GAATAGTAGG	TTGAATTGAT	TTGGTAGATA	TCTAAGTTGT	9720
TATACTCGGC	ACTAGAGTAC	TTACGTTTGA	CATTGGCTCC	AACCTTATAG	AGTTCATTTG	9780
AAGCATAGTC	AATCTCCTCA	TCGGTCAGGA	TATCCTTGAC	ATCTACTACT	CCAATCCCAT	9840
CATGGGTATC	TAGCGTCGTA	AATTGCTTCA	TCGGGCTCAT	CTTTAACCAC	TTAGCCAAAC	9900

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GCTCTGTTCT	GGAAGCTGTA	AGAGTATAAA	GTGTCACCAT	TGGAAGAGCA	AAATCATAAA	9960
CATAGTAATC	ATGGTCTGCT	ATTTTAAACT	GAATCGAATA	GTGTTTCATGA	ATCTCAGGTA	10020
AAAGCTCTGT	CCCATACTCA	GCAGCGATAT	CTCGAACTTT	GTCCAATAAA	TCCCAAATAT	10080
CTGGTCCAC	AAAGAAATCA	TTAGTATCCA	ATTTCTTCAC	TGCATAAGCA	AAGGCATCTA	10140
GACGAATCAA	ATCACACCCA	TTACTTGCCA	AGTGCTGAAT	GGTCTTACGG	ATAAATTCCA	10200
TAGTTACTTC	TTTGGTCACA	TCAAGATCAA	TCTGCTCCTC	ACCAAAGGTA	TTCCACAAAT	10260
GTTCCACTGA	ACCATCTTCA	AACACAATCT	CTTGCTTTGG	TGCACGATCC	TTACGCTTGT	10320
AAATTAAATC	TACATCAGAC	TGTGTCGGAC	GGTTTTCTGG	CCAAAACCTA	TCCCAGTTTA	10380
AAAAGAGAGC	TTTAAATTC	CTGGCTTCAT	GTTTTTCTTG	ATAGTCCTTA	TAATACTTGG	10440
ATTGACGAGA	AATATGATTA	ATCATAAAAT	CAAACATAAG	ATAATATTTT	TCACCTAAAC	10500
GCTTCACATC	CTCCCAATCA	CCAAAAGCTG	AGTCCACTTC	GTCGTAGTCA	ACTGGCGCAA	10560
ATCCACGATC	AACTGTTGAT	GGGAAAAATG	GTAAAAGGTG	AACTCCTCCA	ATAGCATCTC	10620
CAAAATGCTC	TTCCAAATTA	TCATATAAGT	CTTTAAGATT	ATTTCCAAGG	CTATCAGAAT	10680
AGGTAATCAA	CATGGTTTTA	TTTTGAATTG	GCATCATTAC	TCTCCTTTTT	CTAATTGAAG	10740
CCAAGTCTCA	TATGATCTGG	CTTCATAAAT	AAAATTCATT	TTAAATCTCT	ATTTATCATC	10800
AAACTCGTAC	TAATATAGAC	TGTGATAAAC	AAAGTACTAC	TTTCTTGTTT	TCTGCATAGA	10860
ATTATCAACA	AGCTAACTC	TTCCTCTGTG	TCAAAGACTA	TAGATTCCAT	GAGCTCTTCT	10920
TATACTCTTC	GAAATCTCT	TCAAACCACG	TCAGCTTCAC	CTTGCCGTAG	GTATGGTTAC	10980
TGACTTCGTC	AGTTTCATCC	ACAACCTCAA	AACAGTGTTT	TGAGCAACCT	GCGGCTAGCT	11040
TCCTAGTTTG	CTCTTTGATT	TTCATTGAGT	ATTACTTCAC	TGCCCCGTG	CTCATTCCTG	11100
AAATGATATG	GCGTTGGAAG	AAGAGATAGA	CAATGGTGAT	ACTGATAATG	CCGACCACGT	11160
AAGAGGCAAA	GCTTGGTCCG	TAGTCGTTGA	AATATTGGCC	TGCGTAGTTG	TATTGGAACA	11220
AAGGCAGAGT	CCACATTTTG	GAATCCCGGT	TCAAGACAAG	GAGTGGCAAC	ATGAAGTCAT	11280
TCCAGAACCA	AAGGCATTG	ATGATCATGG	TTGTGCGCATG	CATCGGTTTC	ATCATTGGA	11340
AGATGATGCG	GAAATAGGTT	GTAAATTGAT	TAGCCCCATC	GATCTCTGCT	GCTTCATCCA	11400
GACTTTCTGG	AATCGAGATT	TTGATATAGC	CAACATAGAG	AAAGAGGGTC	TGTGGAATCG	11460
CATAGGTCAA	GTAGAGCAAG	ATCAAACCAA	AGGTATTAGC	CAAACCGAGT	TTACTCATCA	11520
TAACCGTAAT	CGGAATCATG	ATGACTTGGA	AAGGTACGAA	GATTCCGAGG	ATTAAGAGGG	11580
TATACATGAT	GGTAAAGGCT	TTTCTTTTAC	TCATATTGCG	AGCGATGGAG	TAGGCTGCCA	11640

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TAGGGATAAA	GATCATTACT	GCAAGTAAAG	ACAAGACAGT	GATGACGACA	GAGTTCCAAT	11700
AATAGCCTCC	AATCCCATCA	GCTAAGAGAC	GGCTAAAGTT	GTCCCATGTG	AAGTTGGTTG	11760
GAAAGCCAAA	GAAATTATCT	ACAATATCCT	TAGTGGGTTT	GAAGGAACTA	AAGAGGGTAG	11820
CAAGGAGCGG	CACTAAAATC	AGAACCGATC	CTAGAATCAA	TAGAATGTAT	TTGCCAATCA	11880
GGGCTTTTCT	TTCATCTTGT	TTCATCATGC	TTCTCCTCTT	AAATTTCAAA	TTTCTTAGAT	11940
ACTCTCAATT	GGATGATCGA	AATCACTACA	ATTAAGAAGA	ACAAGATTAC	GGCAATGGCA	12000
TTGGCATAAC	CGAATTGGTT	GTTTTTAAAG	GCATAGTTAT	AAACCAAGAG	CCCAAGTGAG	12060
GTTGTGGCAT	TGTTTGGACC	ACCACCGGTC	ATGGCAAAGA	CTTGGTCAAA	GGCAGTCAGC	12120
CCACCTTTTA	GGGCTAGGAT	AAAGACCATA	GAGACACTTG	GTAGCAAGTA	AGGCAATTCA	12180
ATGTTCCAGA	AAACTTGCTT	GCTAGTCGCA	CCATCAATCC	TTGCTGCCTC	TGTAATCTCA	12240
GTTGGAATAG	ATTGCAAACC	AGCTAGGAAG	ATGATGATGG	GCATAGCCAC	CCCTTGCCAA	12300
AGAAGGACAA	AGACAGCCGC	AAAGATTGCT	CCCCACTTAG	TCCCTAAAAG	ACTGGTTTGG	12360
AAAAATTCAA	TATGAAGGGC	ATTTCCAATC	GCTGGAAGAC	CGTAGTTGAA	GACTTGCTTG	12420
AAGATCAAAG	CCACTGTCAA	ACCAGATAAA	ACAGCTGGGA	AGAAGAACCA	AGCACGGAAG	12480
AAGGTTTGGC	CTTTGATTTT	AGAATTCAAG	ACACGCGCAA	TGAAGATCCC	GAGTGCAATC	12540
TCACCAACCA	CCATGGCAAT	CGCAATGATT	GCGGTAAAGC	CAATCGCATT	CATGAATTTT	12600
GGATCCATGA	AGAGGAGCTT	AAAGTTGTTT	AAGCCAACAA	ATTTGTAGTT	ATAAGTCAAT	12660
CCTGTCCAGT	TGGTAAAAC	GTAAAAGGCT	CCTTGAAACA	TCGGCACATA	GAAGAAAATT	12720
GCTTGTAACA	AGAGGGGGAT	GACCACAAAA	GCCCATGCCC	AATATTTTTG	TAATACTTTT	12780
TTCATAGTCT	CTCTACTCCT	AATCCACATC	CGCTTTCATC	GGGTAAAGA	AGGCATTCAA	12840
ATCATTGACC	ATGCCTTGTT	TATCACCGGT	CAAGACATAG	TTCATGGTCA	AGGTATGGAA	12900
GTCTGCTTCA	CTGGTCCAGT	ATTGTTGCAA	CCAGACCAAG	TGACGATCCG	TAAAGGCATA	12960
TTCGGTCATA	CCAGCAAGCG	GTGAATCTTC	TCCTGCTTGT	TTGACCCCTT	CGATCGCTGT	13020
TGGAGATCCG	TCCACATCGT	AGTATTTTTG	CATGACTTCT	GGACGGGTCA	TATATTCCAC	13080
AAAGGCATTG	GCTTCTTTTG	GATGTTTGGT	GGTGGCTGAG	ATAGACCATG	CCAAGTCTCC	13140
CGCACCAACG	GTAAAGCTTT	GTCCTTTTTC	TTTTCTGGA	ATCATGAAGG	TCCCAATCTT	13200
AAAGTTCGGT	TTTTGTTCAT	TAATCGCTGT	GATCGCCCAA	GACCCATTTG	GTGTCATGAG	13260
GACATCCCCA	CGTGCGAAGG	CTCCGATAAC	ATCGGTATAG	CCAGCACCTT	CCCAGTTCTT	13320
TTGCTTAGAT	CCATTGATGC	GAAGGATGTC	CATGACCTTG	ATATCATCTT	TCATAATCGG	13380
ATCCGACAAT	TTAATGGCAT	TTGGTTGAGA	ATAACGAAGG	TATTGATTTG	CTTCTTTTCC	13440

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TCCACCTGTT	GCTGTCGCAA	AGGCTAATTG	ATTGTAACCA	TTGAGTGTCC	AAGCATCTGC	13500
ACCTGCAATT	CCAAATGGTG	TTTGTCCTTT	AGCAACGATA	TCTTTGACTA	ACTGTTCAAA	13560
TTTCATCCCAG	GTTCAGGAA	CCTTCAAGCC	CAGTTCTTCG	AATTTATCTT	TGTTGTAGTA	13620
AATTCATAA	GCATTAGCTG	TAAAAGGAAC	GTTGTAAACT	TTTTCGTTTA	CAGCATATTT	13680
TTTCAGCGTAG	CCATTTTCA	CGCGTTTCAG	GTAGTCTTTG	TTGCTCAAAT	CTTCAAAAAC	13740
ACCTGCTTTT	GCCCATTCCT	GCAGTTCGAT	GGACTGTGGG	TAAATATTGA	CCACATCAGG	13800
CACATCTCCT	GCGAGAACGC	GTGTCTTCAA	TACTTCACCA	GCATTTGGTA	CATTGACGAC	13860
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GGTCATTTCT	TTTTTCTGGT	TGAAATACTC	GATGGTCACT	GTGCCATCCG	CAGATTTACC	13980
ATAGTTGGAG	CAAGCGCCGA	GCCCAAACAA	AGCTAAACCT	GTAGTTGCAA	GAAGTCCGAT	14040
TTTTTTATAC	CATTCCATTA	GAAAGCCTCC	TTTATAAAAT	TATACACCTT	TATTGAACTG	14100
CACCCCAAAA	GTTAGACAGA	ATAAATCTAA	CTTTTGGGGT	CAGTACATAT	CATAGTTTTTC	14160
TAAAAATATA	CTGTCTACTC	AAAAAATCTC	CTTGGGATAA	GATAACAGTT	AAGCCCGCAT	14220
ACATTAGTTC	TGCACCTGAG	TAAACTTCGC	CATTTTCCTG	TAATTTATAT	AGTCCCTCTT	14280
CATCCAAATC	TTTAAATTTT	AAAGTTGTTT	CCATGGTCTC	TACAACAGAT	AAAACGCGAA	14340
CGTAGGTAC	AATCGTTTGA	TTTCCGTAAT	TAAATTGTAC	AGCTGCTTCA	TTGGATACAG	14400
TATCAGGATT	AATTAGTCTA	TACTGCTGTC	CTAACTGAAC	TACTGGTCGT	AATTCCTTAT	14460
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GTCATAGCC	CAAATTTCCC	ATCATTGCTA	CAAGGCCACG	TGTTTCTAAT	GGTGTCAATC	14580
GTCCCATCTG	ATGATTGCGT	ACTGCTGACA	CATGAGCCCC	CATAGAAATG	GTTGGATAGA	14640
GATAGGATGA	ACCGTATTGA	ATTGGTAAAC	GTGCAATGGC	ATCAGTATTA	TCACTAGCCC	14700
AGACTTGTGG	GAAATAGCGC	ATCATACCAA	GATCATTTTCG	TCCACCACCA	CCAGAGCAGG	14760
ACTCAAAGAG	AATATGGCTG	TGCTTCTCTG	TCAGATAAGA	AACGAGTTCA	TAAAGCCCCA	14820
GCATGTACTG	ATGAGATTGC	ATCTGTGTCT	CTAGATAAGT	TAATCCATTC	CCTAGCTTAG	14880
TGATATTGCG	GTTCATATCC	CATTTAATGT	AATCAATATC	ATGATAAAAT	AGGAGTTGAT	14940
CTAAGACACT	TTTCAAGTAT	TCTACTACCT	GAGGATTGGC	AAGATTAAGT	ACTAATTGAT	15000
TCCGAGAATA	AGTATGCTCA	TAGCCAGGAA	CCTGAATAGC	CCAGTCAGGA	TGTTGACGAT	15060
ACAAATCACT	ATCTACAGAA	ATCATTTTCG	GTCTAACCA	AAGTCCAAAC	TGCAAACCTC	15120
TTTCATGGAT	AGCTGAAATC	AGACTTTCTA	GACTTCCACC	CAGTTTTTCC	TCATTAACAA	15180

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CCCAATCACC	TAAAGCACGA	TTATCATCAA	AACGATTGCC	AAACCAACCA	TCATCTAATA	15240
CAAAAAGTTC	AATGCCAACT	TTCTTAGCTT	CATCTGCTAA	CTCTAACAGT	TTTTCTCTCT	15300
GAAAGTCAAA	GTAAGTAGCT	TCCCAGTTAT	TGATTAGAAT	TGGACGTTCT	TTTTTAGAAA	15360
ATTCACTTAG	CATAATGTGC	TTCAGTACAA	AATTCTGACT	TTCATGACTA	ATACCAGTTA	15420
ATCCCTGATC	TGAATGAGTC	ACTAAAGCTA	CCGGTGTTTC	AAAGTATTCC	TCAGGAGCTA	15480
ACTTCCAAGA	AAAGTTTCT	GGATTAATGC	CAATAGCCAC	CCGAACCTCA	TTCAATTGAT	15540
TTTTTTGAAC	AAAAGCTTCA	AAGTTGCCAC	TATACATTAG	TTGAATAGCA	AACACATTCC	15600
CAGCATCCTC	TGTGACTCCT	TGTTCGCATA	GTAGAAGAGC	TGGTGTTTGA	GCATGACCAG	15660
AAGCACCTCG	GTTTGAACTA	ATCGAAAAGA	TTCTTGTTC	TACCTGTTGA	CGTCTAACAG	15720
TCTTTTCACG	AGCATAAGCA	CCCTGCAGAG	TTACTATTTT	GTAATCTGCA	GCTGGAAAAT	15780
CAGCCATAAA	AGAAAAATCT	TTATGGATGA	CAACTTCCTG	ATTACTATTA	TTATCTAATT	15840
TACTGTAGCT	AGCAATAGTC	GCATCATTAT	TAAAAGTAGT	ATAATACAAA	GTCAGACTAA	15900
GTTGAGCCTT	AGAATCTTCT	AACATTAAGA	CAAGAGTCTC	TGTATCGTCC	ATGCTATGTG	15960
GAGAAGGTAA	GCCCTGTGGA	CCATTCTGAC	CTTTTAAAT	CTTTGCTTCT	ACAAATCGAA	16020
AGTCTGTAC	TTCAATTACA	CTATGCTGAA	CCTGTATGGT	TGGTTTCCTA	AAATCTCCTA	16080
AGCCATGTTG	TCCAAAAATC	TGTCGCTGAG	TATCTAAACT	AAAGGTTCGA	TTAGTAGCCG	16140
TTGGATTTCC	TGAAAAGGCA	TGGTCTCGTT	CATAAACACT	ATTGGAACCT	TTATAGTTCT	16200
TAATAGTCTT	TCCTAAATGT	TTCAAAAAGTA	AGTAGCCATT	TCGATTTTCA	ATAATCAAAC	16260
TTAGATTTTT	ACTCTCAACA	TAAAATAGAT	TATTCTCTAT	CCTAACTCCC	ATTTACTTCA	16320
CCTCATCACT	TTATTGATTA	TATTTTATCA	CCTGAAATCG	CTTTCCAAAA	TAGAAAAATG	16380
TCTCAAGAAT	ATGGTAAAT	GTTAGGTAGG	AGGTAGCACA	TGTTAGTTTT	TTCAGAATAC	16440
CAGACTGGAA	CAATCGACCT	TGCCCTAAGC	TTTATGGAT	ATGAGGAATG	CACACCTAAT	16500
TACTCTTTTG	GTCCAGCCAT	TCGTGATACA	TACGTCTTAC	ATTACATTAC	TAAAGGACAA	16560
GGAAAATTTT	ATTACAAGGG	TAAAATTGTT	GATTTAAAAG	AAGGAGATTT	CTTTCTATTA	16620
AAACCAGAGG	AACTAACCTT	TTATCAAGCA	GATAGTAAAG	AACCTTGGGC	CTACTACTGG	16680
TTAGGAATCA	CTGGAGGGAA	AGCCCTGAT	TATTTTGCTC	TTTCCCAAAT	TTCTGATCAA	16740
TCCTATCTCA	TCCAATCTGA	AACTTGTCAT	ACCCAGACTA	CTGCAAAACT	CATCTCAGAC	16800
ATTGTCCGCT	TCGCTCAGAT	TACAAAATCA	AGTGAATTAG	CTCAACTCCA	TATCATGGGA	16860
CAACTTCATG	AACTGATGTT	TCATCTGGGA	ACTATTGCTC	CCAATCAGAA	AAAAAAGAAT	16920
ATTTTCATCAA	CCCACCAACT	CTATCTTGAA	TGCAAACGAT	TAATTGATAG	CCACTATCCT	16980



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CAATCACTTA	CAATTCAAGA	TTTAGCAAAA	GAATATCCG	TTCACAGAAG	CTACTTATCA	17040
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CCAAGTCATA	CAAGAAAAGA	ATACTCTCAA	TACCAACTAG	TAAGAAAGGC	AACATTATGA	17280
AATCCTACCA	AGCTGTCTAC	CAAATCCTAT	CTAAGAAAC	CGACTATATC	AGCGGAGAAA	17340
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ACCTTATTCT	TCCAGAGATT	CTAGAAGAAA	ATCTTCCAAT	TAAAGTCAGC	TTTAAACCCG	17520
AAACAAAATC	AACACAATA	GATGCAAAAG	AAGCAATTGA	TTTAGGCCAT	GAAGCAAATA	17580
CCCTCTATCT	AGCTTCCTAT	CAAACAGCAG	GCCGAGGCCG	TTTTCAACGT	TCCTTCTACT	17640
CACCACAAGG	TGGTATTTAT	ATGACACTCC	ATCTTAAACC	AAATCTCCCC	TATGACAAAT	17700
TACCATCCTA	CACACTACTT	GTAGCTGGAG	CTGTCTACAA	AGCCATTAAG	AACCTAACTT	17760
TAATAGATGT	CGACATAAAA	TGGGTCAATG	ATATCTATCT	AAACAATCAT	AAAATTGGAG	17820
GAATCCTTAC	TGAAGCAATG	ACCTCTGTAG	AAACTGGCTT	AGTCACAGAT	ATCATTATTG	17880
GAGTAGGTAT	CAATTTCACT	ATTAAAGACT	TCCCTCAGGA	ATTAAAAGAA	AAAGCTGCCA	17940
GCTTATTTAA	AGCTACAGCT	CCTATAACAA	GGAATGAATT	GATCATAGAA	ATCTGGCGTG	18000
CTTCTTTCGA	AACACCAGCA	GAAGAGCTAT	TATACCTATA	CAAAAAACAG	TCATTTCATTC	18060
TAGGAAAAGA	AGTCACCTTC	ACACTAGAGC	AAAAAGACTA	CAAGGGACTT	GCTAAAGACA	18120
TCTCAGAAAA	TGGAAAACCT	TTAGTTCAAT	GTGATAACGG	AAAAGAAATC	TGGCTAAATA	18180
GTGGCGAAAT	TTCTCTCAAT	AGTTGGAAGT	AAAATAACAC	AATTATAATA	TAAACGATAT	18240
AAAAATAACT	TCAGATTAGT	AATTCAATTA	AGTTTACGG	ATCTGAAGTT	TTATTGGCTC	18300
TAAAAATAAA	AAAGAGAGTT	ACAGACTCTC	ATTAAAACGG	AGAATAAGGG	ATTCGAACCC	18360
TTGCGCCAGT	TACCCGACCT	AACGATTTAG	CAAACCGTCC	TCTTCAGCCT	CTTGAGTAAT	18420
TCTCCAATTA	ATGGGCACGA	GTGGACTCGA	ACCACCGACC	TCACGCTTAT	CAGGCGTGCG	18480
CTCTAACCAC	CTGAGCTACG	CGCCCAAGTT	AAAAAAGTTG	GTAATTTGAA	CAAAGTTCAA	18540
AGCGGGTGAC	GAGAATCGAA	CTCGCGACAA	CAGCTTGGAA	GGCTGTAGTT	TTACCACTAA	18600
ACTACACCCG	CATAAATACT	ATCAATAAAA	TGGCGCGAGA	CGGAATCGAA	CCGCCGACAC	18660
ATGGAGCTTC	AATCCATTGC	TCTACCAACT	GAGCTACCGA	GCCTTATTGC	GGGAGCAGGA	18720

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TTTGAACCTA CGACCTTCGG GTTATGAGCC CGACGAGCTA CCGAGCTGCT CCATCCCGCG	18780
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AACCGGACGC TCTAGCCAGC TGAGCTACAC CGCCATGAAT CGGGAAGACA GGATTCGAAC	19080
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TCGTTACCAA TCGCAGGATT TTAAGTCCTG TCGCTCTGCC AGTTCCGCCA CCCC GGCTC	19320
TCTAAGCGAA CGACGGGATT CGAACCCGCG ACCCCCACCT TGGCAAGGTG GTGTTCTACC	19380
ACTGAACTAC GTTCGCACTG TTTTCTTCTA TCTAAAAATG CCGGCTACAT GACTTGAACA	19440
CGCGACCCTC TGATTACAAA TCAGATGCTC TACCAACTGA GCTAAGCCGG CTCATTTGTT	19500
ATATCTTAAT GCGGGTTAAG GGAATTGAAC CCCACGCCG TTAAGCGCCA GATCCTAAAT	19560
CTGGTGCGTC TGCCAATTCC GCCAAACCCG CATATATGAC CCGTACTGGG CTCGAACCAG	19620
TGACCCATTG ATTTAAAGTC AATTGCTCTA CCAACTGAGC TAACGAGTCT AAAATAACTT	19680
GCGTTACCTT AAACGGTCCG ACGGAATCGA CCCGGTAC	19718

## (2) INFORMATION FOR SEQ ID NO: 100:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 4117 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 100:

CCGTGGAAAA GTCTGGATAG TGAATGGTCT TCACACAATG ACCTGAAAGA AGCCTGAGAA	60
TAATTATGGA GAGTAGCATT CTGAGAGGTG TTAGCAGAAC CATATGACAG AGCTGTTTGA	120
AGAGGGAATA TTGAGGAGAA AAATCCTGAG CCTACCAGTT GGAGTTGGAA AGAGCTGACT	180
GTTAGATCAT GGTTTATTAT CCACAACCTG TGGATAACTT TGTGAATAAG AGAAGTTGCT	240
AAAGAAGGAG ATATATAACG ATGAAGAAAA TCAAACCGCA TGGACCGTTA CCAAGTCAGA	300
CTCAGCTAGC TTATCTGGGA GATGAACTAG CAGCTTTTAT CCACTTCGGT CCTAATACCT	360
TTTATGACCA AGAATGGGGG ACTGGACAGG AGGATCCTGA GCGCTTTAAC CCGAGTCAGT	420

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TGGATGCGCG TGAGTGGGTT CGTGTGCTCA AGGAAACGGG CTTCAAAAAG TTGATTTTGG	480
TGGTCAAGCA CCACGATGGC TTTGTCCTTT ATCCGACAGC TCACACAGAT TATTCGGTTA	540
AGGTCACTCC TTGGAGGAGA GGAAAGGGCG ACTTGCTCCT TGAAGTATCC CAAGCTGCCA	600
CAGAGTTTGA TATGGATATG GGGGTCTACC TGTCACCGTG GGATGCCCAT AGTCCCCTCT	660
ATCATGTGGA CCGAGAAGCG GACTACAATG CCTATTATCT GGCTCAGTTG AAGGAAATCT	720
TATCAAATCC TAACTATGGG AATGCTGGTA AGTTTCGCTGA GGTTCGGATG GATGGTGCCA	780
GAGGAGAGGG CGCGCAAAAAG GTTAATTATG AATTTGAAAA ATGGTTTGAA ACCATTCTGTG	840
ACCTGCAGGG CGATTGCTTG ATTTTTCCTCA CAGAAGGCAC CAGTATCCGC TGGATTGGCA	900
ATGAACGAGG GTATGCAGGT GATCCACTGT GGCAAAAGGT GAATCCTGAT AAACCTAGGAA	960
CAGAAGCAGA GCTGAATAT CTTGAGCAGC GGGATCCCTC GGGCAGCATT TTTTCAATCG	1020
GAGAGGCAGA TGTTTCCATC CGTCCAGGCT GGTTCCTACCA TGAGGATCAG GATCCTAAGT	1080
CTCTCGAGGA GTTGGTCGAA ATCTACTTTC ACTCAGTAGG GCGAGGAACT CCACTCTTGC	1140
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CTGGTCCAGC TCTTTCCGCA GACTTTGCTT GTCGCCATTT GACAGACGGC CTTGAGACCA	1320
GCTCTTGGGC AAGCGATGCA GACTTGCCCA TCCAGTTAGA ACTCGACTTA GGTCTCTCTA	1380
AAACTTTTGA TGTAATTGAG TTAAGAGAAG ATTTGAAGCT AGGGCAACGA ATCGCTGCTT	1440
TTCATGTGCA AGTAGAGGTG GATGGTGTCT GGCAGGAGTT TGTTTCGGGT CATACTGTTG	1500
GTTACAAACG TCTCTTACGA GGAGCAGTTG TTGAGGCACA GAAGATACGT GTAGTCATTA	1560
CAGAATCACA GGCTTTGCCT TTGTTGACCA AGATTTCCTT TTATAAAACT CCTGGATTAT	1620
CAAAAAAAGA AGTTGTTTCA GAACTAGCAT TTGCAGAAAA AAGCCTAGCT GTGGCAAAGG	1680
GAGAAAATGC CTATTTTACA GTTAAGCGCA GAGAATGTAG TGGTCCTTTA GAAGCTAAGA	1740
TTTCGATTCA ACCGGGGACA GGTGTCCATG GTGTCGCCTA TCAGGATGAG ATTCAAGTCC	1800
TTGCGTTTCA AACTGGTGAG ACTGAAAAAA GTCTGACGCT ACCAACCTTG TATTTTCGAG	1860
GAGATAAAAC CTTGGATTTC TATCTGAACC TAACGGTGGA TGGTCAGCTT GTGGATCAAC	1920
TTCAAGTCCA AGTTTCATAA AAGAAGAACC TTTGCGCGAT GCAAAGGTTC TTTTGGTTAT	1980
TAGTGACTTG GTAACCAGCT GAGGGTGAAA GTTAGTTGTT CAGCTTTTAA GAGGTCTTGG	2040
TGTTGAATAG TTGATACGAG TGTTTTGTCC AGTCGCGATT CTTTGACAAA GTTAAAATGG	2100
TTGTGGTTTT GTTTAGTATG GATATCCAGC CATTTATCTT CTTTAGCGAG GTAGACTCGT	2160

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AGATGGTCAA	AGAGAGGGAT	TCCGAGGTCA	TAGCTTGGTT	TTCCTGGACA	GGTTGGATAA	2220
AATCCGAGAG	CTGACCAGAT	GTACCAAGCA	GAGAGACTAC	CATTGTCTTC	ATCTCCAGGA	2280
TAGGCTTCCC	AACCTGGGTG	AAAAGCTTTC	TGACGGAGCG	TCTTGATAAG	AAGGGCAGTG	2340
TAGTCAGGGT	AATCGCTGTA	ACGGAAGAGA	TAAGGAATGT	GGAACTAGG	CTGGTTGGAA	2400
ATGGCTATTT	GTCCAAAAGG	AGCAGTAGCC	ATCTCGCTCA	TTTCGTGAAT	TTCGTAACCA	2460
TAGCCTGTTG	TTTCAAAGAG	GGGAGCATCT	TGACAGGCTT	TCAAAAGATA	GTTGCTAAAAG	2520
GTTTCTTTTC	CACCCATCAG	TTGGATTAAG	CCAGGGATGT	CGTGGAGAAC	GCCTAAAGTA	2580
GCTTGAATGG	CAGAGCATTC	AGCGTAGTCT	CGCCCCAAC	TATAAGGAGA	GAAGTCAGGG	2640
TGAAAGTTTC	CTTGATTGTC	TCGTGCTCGC	ATGTAACCTG	TCTCAGCGTC	AAATAGCTGG	2700
CGGTAATTTT	GTGAAGCAGC	CTTGTAGGTT	TCAGCGATTT	CTATGTTCTC	TAGTTTTTTTG	2760
GCACAGCTGG	CGATACAAAA	GTCACTATAG	GCATAGTCTA	GAGTATGGCT	AACACTTTCG	2820
TGGTGGTCGG	TAGAGAGGTA	ACCTAGTTCT	TGGTATTGGG	CTAGTCCGTG	GCGGCCATTG	2880
ATGCCGAGAG	GGTCGGCTTT	GCTGGCTGTT	TCGAGCATGG	CTTGAAGAG	TTCTCCTTCT	2940
AGGTCGGGGG	TCATGTCCTT	GCAGGCGCTA	TCTGCGATAA	TACCGTCTAA	AAGTGACCT	3000
GGCATCATAC	CCCGTTCATC	TGGAGCCAGC	CATTTTGGAA	GGAAACCAGT	ATCGCGGTAG	3060
CTATTGAGGA	AACCTTCTAA	AAAGCGTTGA	TAGTGCTCCG	GTATGATAAG	GGCAAAGAGG	3120
GGGAAGGTGG	TGCGGAAGGT	ATCCCAGAAA	CCATTGTTGC	TAAAGAGGAC	ACCAGGCTTG	3180
ACAGTACCAG	TAGCCAGATC	CATGTGGATG	GCTTGCCCTG	ATTCATTAAT	CTCATAAAAA	3240
GTCTGTGGGA	AGAGGAAGAG	TCTGTAGAGG	CAGTGGTCAA	AGAAGGTTCG	GTCAGCCTCT	3300
CCTGTCTCTA	TAATGTCAAA	ACGATGGAGG	AGATTTTCCC	AATCCACTTG	GGCACTTGAT	3360
TTACAGCTAT	CAAAATCTTC	TTGAGGTAGA	TTGATTAGAG	CTTGAGAAGG	AGAGATGAAA	3420
GAAGTGGCTA	GTTGCATCTC	GGTTTGACTA	CTTGCTAAGT	CAATTGCGCA	GTCTCCAGCT	3480
TCTTGGCTGA	TAGCAAGAAT	ATCCGTGTTT	ATTTGCAAGG	CAGTGAACAT	CGTTAGCGAA	3540
TTTTTGTTAG	TTTCAGTTTT	ACCTTCTTGT	CGCAGGGCAA	GAGTCCGCTT	ATCTACTTGC	3600
TCTACTGTCA	GTTTCATCTG	TGCGTGAAGA	TAGAGGGAGA	GGGCTTTGCC	TTGCTTTTGA	3660
TTCAAACGAA	TAGAAGCACC	ATAGCAAGTC	GGTGTGAGCT	GGGTTTCAAT	CTGATAACGC	3720
AGAGAAAAGA	GCTTCAAATA	GTGAGGCTGG	AAGCAAGCTT	TATCTATATC	ATAAGAAGAC	3780
TGGCGGTGAA	AGAGGCTGTC	TCCCCCAGT	TGACTGGTGA	CAGGTGTCAG	AAGGAGCCAA	3840
GAGTAGTCCC	CAATCCAAGG	ACTGGGCTGG	TGAGTTAATC	GAATCCCCTG	AAAGATAGGC	3900
AGATGTGGAT	CAAAAAACCA	AGATCCATCC	TGGTCACTGG	TCTGGGGCAC	AAAGTAATTC	3960

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ATCCCAAAG GCACGCCTGT GTATGGCAGG GTATTTCCCC GAGAAAAGGC ATGCTTGTG	4020
GTAGTTCCAA AACGGGTATC GATGGTATCA AGTAGTGGTT TCATAGTCTT TCCTTTAGCT	4080
GTTTTTCTAC ATTATATCAG TAATAGAGGG CCTTTAG	4117

(2) INFORMATION FOR SEQ ID NO: 101:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 2727 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 101:

CTGGTTCAAT TATTATTCAC TCTAAGTAGT CATATGTTCT TTATTTATGT GAGTTTTTAC	60
CTTTTAAAGG ATCTTGTTAG ATGGGAGAAG GTTTTAAAAG TGACAGATGA TAATACAAGA	120
AAAGTTCGTT TATTAGTAGC CTTTTTTAGC ATTGTCATAG GCTACATCCT GAGTTCTTTC	180
TTTATTAGCC TGTATCATTT GTGGCAAGAA GCGCTTAGAG GATTATTATG AAATCAAGAG	240
TAAAGGAAAC GAGTATGGAT AAAATTGTGG TTCAAGGTGG CGATAATCGT CTGGTAGGAA	300
GCGTGACGAT CGAGGGAGCA AAAAATGCAG TCTTACCCTT GTTGGCAGCG ACTATTCTAG	360
CAAGTGAAGG AAAGACCGTC TTGCAGAATG TTCCGATTTT GTCGGATGTC TTTATTATGA	420
ATCAGGTAGT TGGTGGTTTG AATGCCAAGG TTGACTTTGA TGAGGAAGCT CATCTTGTCA	480
AGGTGGATGC TACTGGCGAC ATCACTGAGG AAGCCCCCTA CAAGTATGTC AGCAAGATGC	540
GCGCCTCCAT CGTTGTATTA GGGCCAATCC TTGCCCCTGT GGGTCATGCC AAGGTATCCA	600
TGCCAGGTGG TTGTACGATT GGTAGCCGTC CTATTGATCT TCATTTGAAA GGTCTGGAAG	660
CTATGGGGGT TAAGATTAGT CAGACAGCTG GTTACATCGA AGCCAAGGCA GAACGCTTGC	720
ATGGTGCTCA TATCTATATG GACTTTCCAA GTGTTGGTGC AACGCAGAAC TTGATGATGG	780
CAGCGACTCT GGCTGATGGG GTGACAGTGA TTGAGAATGC TGC CGTGAG CCGT GAGATTG	840
TTGACTTAGC CATTCTCCTT AATGAAATGG GAGCCAAGGT CAAAGGTGCT GGTACAGAGA	900
CTATAACCAT TACTGGTGTT GAGAACTTC ATGGTACGAC TCACAATGTA GTCCAAGACC	960
GTATCGAAGC AGGAACCTTT ATGGTAGCTG CTGCCATGAC TGGTGGTGAT GTCTTGATTC	1020
GAGACGCTGT CTGGGAGCAC AACCGTCCCT TGATTGCCAA GTTACTTGAA ATGGGTGTTG	1080
AAGTAATTGA AGAAGACGAA GGAATTCGTG TTCGTTCTCA ACTAGAAAAT CTAAGAGCTG	1140
TTTCATGTGAA AACCTTGCCC CACCCAGGAT TTCCAACAGA TATGCAGGCT CAATTTACAG	1200

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CCTTGATGAC	AGTTGCAAAA	GGCGAATCAA	CCATGGTGGG	GACAGTTTTC	GAAAATCGTT	1260
TCCAACACCT	AGAAGAGATG	CGCCGCATGG	GCTTGCATTC	TGAGATTATC	CGTGATACAG	1320
CTCGTATGT	TGGTGGACAG	CCTTTGCAGG	GAGCAGAAGT	TCTTTCAACT	GACCTTCGTG	1380
CCAGTGCGGC	CTTGATTTTG	ACAGGTTTGG	TAGCACAGGG	AGAAACTGTG	GTCGGTAAAT	1440
TGGTTCACCT	GGATAGAGGT	TACTACGGTT	TCCATGAGAA	GTTGGCGCAG	CTAGGTGCTA	1500
AGATTGAGCG	GATTGAGGCA	AGTGATGAAG	ATGAATAAGA	AATCAAGCTA	CGTAGTCAAG	1560
CGTTTACTTT	TAGTCATCAT	AGTACTGATT	TTAGGTACTC	TGGCTCTAGG	AATCGGTTTA	1620
ATGGTAGGTT	ATGGAATCTT	GGGCAAGGGT	CAAGATCCAT	GGGCTATCCT	GTCTCCAGCA	1680
AAATGGCAGG	AATTGATTCA	TAAATTTACA	GGAAATTAGG	CTGGAGAACC	AGCCTTTTTC	1740
TAAAGATAAG	GAGAAATATG	AACAAAAAAA	CAAGACAGAC	ACTAATCGGA	CTGCTAGTGT	1800
TATTGCTTTT	GTCTACAGGG	AGCTATTATA	TCAAGCAGAT	GCCGTCGGCA	CCTAATAGTC	1860
CCAAAACCAA	TCTTAGTCAG	AAAAACAAG	CGTCTGAAGC	TCCTAGTCAA	GCATTGGCAG	1920
AGAGTGCTTT	AACAGACGCA	GTCAAGAGTC	AAATAAAGGG	GAGTCTGGAG	TGGAATGGCT	1980
CAGGTGCTTT	TATCGTCAAT	GGTAATAAAA	CAAATCTAGA	TGCCAAGGTT	TCAAGTAAGC	2040
CCTACGCTGA	CAATAAAACA	AAGACAGTGG	GCAAGGAAAC	TGTTCCAACC	GTAGCTAATG	2100
CCCTCTTGTC	TAAGGCCACT	CGTCAGTACA	AGAATCGTAA	AGAAACTGGG	AATGGTTCAA	2160
CTTCTTGAC	TCCTCCAGGT	TGGCATCAGG	TCAAGAACT	AAAGGGCTCT	TATACCCATG	2220
CAGTCGATAG	AGGTCATTTG	TTAGGCTATG	CCTTAATCGG	TGGTTTGGAT	GGTTTTGATG	2280
CCTCAACAAG	CAATCCTAAA	AACATTGCTG	TTCAGACAGC	CTGGGCAAAT	CAGGCACAAG	2340
CCGAGTATTC	GACTGGTCAA	AACTACTATG	AAAGCAAGGT	GCGTAAAGCC	TTGGACCAAA	2400
ACAAGCGTGT	CCGTTACCGT	GTAACCCTTT	ACTACGCTTC	AAACGAGGAT	TTAGTTCCCT	2460
CAGCTTCACA	GATTGAAGCC	AAGTCTTCGG	ATGGAGAATT	GGAATTCAAT	GTTCTAGTTC	2520
CCAATGTTCA	AAAGGGACTT	CAACTGGATT	ACCGAACTGG	AGAAGTAACT	GTAACCTAGT	2580
AAAAGATACG	CCTACACTCC	TATGTCACCT	ATGGATGTAG	GAGTTCTTTT	TACTAGTTTA	2640
AGCAGGACTA	AGACAGGTAC	TAAGACAAAA	TAGCAACTTC	TAAACTAAC	TTCCAGTTTT	2700
GGGAGAGAGA	TGGAAGTTAC	TTTGAGA				2727

(2) INFORMATION FOR SEQ ID NO: 102:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 5717 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 102:

TTTTTTGTAG ATTTAAGTGG GGTGCAATTC CTAAAAAATA AAAAACAATT TTTGAAAATT	60
ATGTTAGCAG GAATTGCTTC AAATTCGATT TTATCACTTA CAGGTTTACT TGTTTTATTG	120
TTCACATCGT ATAAATTGCT TGGACTCTTA TTTTTTATCA TTAACCTAGG TATGATTTTT	180
ATTAATCAA TTCCTTTTT TCAGTATGAT AGTGGTATTA TTTTAAGATA CTTGAATTCT	240
AACAATAATA ACTTGAATTT TCAATATATA GTTCAACTTT TAATAGCATT TGTTATTATT	300
TATTTTCCTT TGAGTCAACT ATTACAGTTT TTGACACCCA ATATTATTGT TCGTAGTATA	360
GGAGGGGTGG TGTCTCTAT ACTGCTTCT ATATTATATA TGATAGGAAG GACGAAATAT	420
GTTCTACGTA AATAGTTATG TTTTGTCTTA TAAAAAGAA GGTATAATGT ATTTACGTGG	480
TCGGAGTATG CGGGAATAG CTATAGAACC TCAAATTTTCG CAAGAATTTA TCAACGATCT	540
ATTTAATAGT TGTAAGGAAC TATTAGAGAT AGAAGAAGTA TTAGGCAGTA AACTAACATT	600
TGAACATAAA ATGAACAAAT TTTAATTTTCG GATGAGATAG ATATTGATAG TAGATATTCT	660
AGAACTAAAG GTTACTATTC GTTATTTTAT AATGAAGAGT ATAATAAAAT ACAGAATAAA	720
ACAGTATTAG TATTAGGAGC AGGAGTCTTA GGATGTTATA TATCTCTAAG TCTAAGTATG	780
TATGGAGTGA GGAAACTTAT TGTGCTGAT TACGATATAA TAGAACCATC AAATTTAAAT	840
AGGCAAATTC TTTATACAGA GTCGGATGTT GGTAAGGAGA AGATTAATGT TCTTTCTGAA	900
AAAATACACA AGTATAATTC AGATGTTTTCAG GTAGTACCTA TTTCTATTAA AGTTTCTTCA	960
GTAGAAGAAT TAGAAAAAAT TGTTCGGAA TATGGGAGTA TAGATTTTAT CGTTAAAGCA	1020
ATTGATACGC CCATTGATAT TATAAAAATT GTCAATCAAT TTGCTGTATC GCATAAGATA	1080
TCCTACATAT CAGGAGGGTT TAATGGATGC TATCTTATTA TTGATAATAT ATATATCCCT	1140
ACCATCGGTT CTTGCTTTGG TTGTCGGAAT ATAAACAAAG ATATAAATAA GTACACTTTA	1200
TCTGATAAGA CAAAGTGGCC GACTACACCA GAGATGCCTG CTATTTTGGG AGGGATAATG	1260
ACTAATTTAA TAATTAAAAT ATTTCTGGGA TGTTATAATG AAATCCTAAT AGATAACGCT	1320
TACGTTTATA ATATGAGAAA TCATGCTCTA AGTCAAGAAA AATATGTTCT GGAAAACGGA	1380
GAATGTCCAA TTTGTAAAAA AATAATAAAG TGAAAGATAA CAATATTAGA GCGAAAACAT	1440
TTATTCGTTT AGTTTGTTTT TGCTTATTAT CAGGAGGAGT AGCTTTTTTA TCTGCTATTG	1500
GGCAGTTCAC TGTATAGAA ACACAATTAA TAGTATTGTT CTTGGGTATT ATTTTGTCTA	1560
TATATTATGC TTAACAAT AAAAATATTC AAACATCATT GGAAAATATA GTATGGCTTT	1620

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TTTCATCGTT	TGAGATTTTA	TTTTTGCTTG	TTAATTTTAG	AACATTTATT	CAGTTACCAG	1680
TGGATATTTT	TATTGGTATG	ATAATATTTT	TAATGCTGTG	GATATTTATT	ATGTTAGGTA	1740
TAGTGTGTCT	TAGTTATTAT	ATAACTTTAT	TATTTAGCAA	GGAGGCTTAG	TATGTTTAAA	1800
AAAATAGGTA	TAATGAGCAT	TTGCATATAT	ATAATTATTT	TATACTGCTT	GAGAATGTAT	1860
CGTATTATCA	ATAATATTGA	AACAATCTTG	CTAACGGTTA	TATGCTTAAT	GTTATTGTTT	1920
TTTTTAAGAC	GTTTATTTGA	TAAAGATAAG	TAAATAGATG	TTAAGTAAAA	ATGTAGAATA	1980
TAAAGGAGGT	GCAATGAGTA	TGATTGAAGT	TAGCCATTTA	TCAAAAAGTT	TTGGTGATAA	2040
AATAGCTTTA	AATAATATAA	GCTTCACTGT	TAAAGAAGGT	TAGATTTTTG	GATTTTTTAGA	2100
ACCATCTGGT	TCTGGAAAGA	CCACAACGAT	TAATATTCTG	ACTGGGCAGT	TCCTTGCCGA	2160
TAAAGGACAA	TCTATTATTT	TGGGACAAAA	ATCTCAAAAT	TTAACAAGCG	GTGAATTAAA	2220
GAGAATTGGA	TTGGTTAGCG	ATACAAGTGG	ATTTTATGAG	AAAATGTCTC	TGTATAACAA	2280
TCTTCTTTTT	TATAGTAAAT	TTTATAATAT	TAGTAAATCA	CGTGTTGATA	ATTTGTTAAA	2340
GCGAGTAGGA	TTATATGATA	GTCGCAAGAT	GGTAGCAGGA	AAATTATCCA	CTGGAATGAG	2400
GCAACGAATG	CTTTTAGCAC	GAGCTCTTAT	CAACAACCCC	GCTGTACTCT	TTCTGGATGA	2460
ACCGACCTCA	GGTCTAGATC	CCACAACCTC	TCGAACAATT	CATGAGTTAA	TTTTAGAATT	2520
GAAAACAGCA	GGGACAACGA	TTTTTCTAAC	GACTCATGAT	ATGAATGAAG	CAACTCTTTT	2580
ATGTGATTAT	GTTGCCTTAT	TAAATAAAGG	GAAATTAGTT	GAGCAAGGAG	CTCCTTCTGA	2640
ACTCATTCOA	AGATATAATA	AAGATAAAAA	GATTAAGGTT	ACAGATTATA	ATGGGAATCA	2700
GATAACTTTT	GATTTTACAT	CACTAGAACA	GGTATCTCAG	ACTGATCTGG	AAAATATTTT	2760
TTCAATTTCAT	TCATGTGAGC	CTACTTTAGA	AGATATTTTT	ATCACATTAA	CAGGAGGAAA	2820
GCTAAATGCT	TAAACGGTTT	CTGGCTTTGG	TATGGTTGCG	TTGTCAAATC	ATCCTTTCCA	2880
ATAAGAGTAT	TTTATTGCAA	GTTTTAGTGC	CTTTTGCTTT	CACATATTTT	TATAAATATC	2940
TTATGGAAAC	ACAGGGGAAG	GTCAACGATC	AACAGGCATT	AGTTCTTTTG	ATGATGTGTT	3000
TACCTTTTTT	TTTTTCTTTG	GCTGTTGGAA	GTCCTATAAC	TATTATCTTG	TCTGAAGAAA	3060
AAGAAAAGTA	CAATTTACAA	ACTCTTCTGT	TGAGTGGTGT	TAAAGGCTCC	GAATACATTT	3120
TATCAACTAT	GTTTCTTCCT	TTTTTGCTAA	CTTTTGTGAT	TATGGGAAC	ACTCCTCTTA	3180
TTTTAGGAGT	TACAATTGTA	CATACTTTTA	ATTATATTAC	AATCGTTCCT	CTAACCTCTT	3240
TATCCATCAT	TTTATTCTAT	TTATTGATAG	GTTTAACCGC	GAAGAGCCAA	GATAGAGCTC	3300
AGGTATATCAG	TCTTCCTGCT	ATGATTTTAG	TTGCTTTCTT	ACCGATGCTA	TCTGGTTTGG	3360
ATAAGACAGT	TGCGAAGATA	ACAGATTATA	GTTTTATGGG	ACTATTTACT	AAGTTTTTCA	3420



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CAAAATGGGA GGAATTTTCA TGGAATAAAA CTCTAATTCC TAATCTAACA CTACTTATTT	3480
GGATTGTTCT TCTATTAACT TTAATTACGA TAACTATTAG GAAAAAGAAA ATTTCTTAAT	3540
TGAGTTATTT TAATGATTAT AAACACAAGT GGGAAGGAAA AAATGAACTG ATCTTTTGA	3600
CAGCAATTCT ACAGAATAGT CTTATTGCTA TATTTTGATT TGAGTGTACG AAAAAAGAAA	3660
AATAACAATA GTGCTCATAC TAATTGCAGA AGTTTGGGT GATAAGATAA CTGATAAATT	3720
GCAATAAAAA ATGCAACATT TTAAATCTC CTCTATAAGT GCTTCAAAA GTGCTTCAAA	3780
ACCTGTCTTG TAATCCAAGT ATTTTGGGG ACGGTGATTA ATAAGCTAGC AAAGCATCAT	3840
TAAGGATTTT TTCGGTAATT GTTGCCAAAT CGGTTAAGA AAATACTCAC GAAGAAGTCC	3900
ATTCGCATTC TCATTACTTC CCCTTGCCA AGATGAATAG GCATCCGCAA AATAAACAG	3960
AATCCCAT TGTCAATTA AAGGTAACA AGCAAACCTCT TTTCTCTGT CCGAAGTGAA	4020
AGTCTTTAAC TATTCTTTTG GAAAGAGTCT TGTGAGGTGT TCAATAGCAG TCAACATGGA	4080
TTTAGCTGTT TTTACTTGAC AAGTGCTAGT AGAAATAATA GAATAGTAAA AAACCTTTAA	4140
AGCAGTCCAG AGAGGCAGCT AAGGTTAGAC GGTGAAAGGG TGGAGACTAC CCATTTTTCG	4200
TGGAACCTTG CTGTTGGCAG GTTCCTTTTT TCGTGGCTTC TGTTGGCCAG ACTCTCTCAC	4260
TAGTAAAGGT AAAAGGAGAA ACCTATGCGA GAACATCGTC CAATCATTGC TCTTGATTTT	4320
CCTAGTTTTG AGGCGGTCAA GGAATTTTTA GCTCTTTTCC CAGCAGAAGA AAGCCTTTAT	4380
CTCAAGGTAG GGATGGAGCT TTATTACGCA GCGGGGCCCTG AGATTGTGTC CTACTTAAAA	4440
GGTTTGGGTC ATAGTGTCTT TTTGGATCTC AAACCTTCATG ACATTCCTAA TACAGTCAAG	4500
TCAGCCATGA AGATCTTGTC TCAGCTTGGT GTCGATATGA CTAATGTCCA TGCGGCTGGT	4560
GGTGTAGAGA TGATGAAGGC GGC GCGTGAA GGTCTTGGGA GTCAAGCCAA ATTGATCGCT	4620
GTAACCTCAGC TCACATCAAC GTCAGAAGCT CAGATGCAGG AGTTTCAAAA TATCCAAACC	4680
AGTCTGCAAG AGTCTGTGAT TCACTATGCC AAGAAGACAG CTGAAGCTGG CTTGGATGGT	4740
GTGTTTGCT CGGCTCAGGA AGTACAAGTC ATCAAGCAGG CTACCAATCC AGATTTTATC	4800
TGTCTGACAC CAGGGATTCG TCCAGCTGGT GTTGCAGTTG GAGATCAAAA ACGAGTCATG	4860
ACACCTGCTG ATGCCTATCA AATCGGCAGT GACTATATCG TAGTGGGACG TCCCATTACC	4920
CAAGCTGAGG ATCCTGTGTC AGCTTATCAT GCCATCAAGG ATGAATGGAC ACAGGACTGG	4980
AATTAAAGAA CTAGATTAGA AAAATAAAAG GAGAATACCA TGACACTTGC TAAAGATATC	5040
GCTAGCCACC TCTTGAAAAT CCAAGCCGTT TACCTCAAAC CAGAGGAACC CTTCACTTGG	5100
GCATCTGGTA TCAAGTCACC GATTTACACT GATAATCGTG TGACACTAGC CTATCCAGAA	5160

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ACTCGTACCC TAATTGAAAA TGGTTTTGTG GAAGCTATCA AAGAAGCCTT TCCTGAAGTA	5220
GAAGTGATTG CAGGAAGTGC AACAGCAGGG ATTCCACACG GAGCCATTAT TGCTGATAAG	5280
ATGGACTTGC CTTTTGCCTA CATCCGTAGT AAACCAAAAG ACCACGGAGC TGGTAATCAA	5340
ATCGAAGGTC GCGTAGCTCA AGGTCAAAAA ATGGTAGTGG TTGAAGACCT TATTTCAACG	5400
GGTGGTTCAG TTCTTGAAGC TGTAGCAGCA GCCAAGCGAG AAGGAGCAGA TGTACTTGGA	5460
GTTGTAGCGA TTTTCAGCTA CCAATTGCCA AAAGCAGATA AGAACTTTGC AGATGCTGGT	5520
GTTAAACTTG TGACGCTTTC AAAGTATAGC GAGCTTATCC ATCTAGCCCA AGAAGAAGGT	5580
TACATCACGC CAGAGGGCCT TGATCTTCTA AAACGCTTTA AAGAAGACCA AGAAAATTGG	5640
CAAGAAGGTT AGGTCAGTAA GATAAAGAGA GACGAGGCTA CCGAGTCTCT TTTACCATTT	5700
TATTTAAAAAT ATGACAG	5717

(2) INFORMATION FOR SEQ ID NO: 103:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 5558 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 103:

CCTGGACTTT CTAAGATGAA ATCTTGCGAC CTGGATCAAG CCCTTCATGA GCATTTTTC	60
GAAGAAGAAT TAGCTGGTCA CTTTCATGTC CTTCTATGGA CTTTTTTTAC AATGGCATTG	120
CTATCACACC CAATACCTAT CTAAGCGCCT GTTTCGTAAA CTTTATTGCA GCTCTTCCTC	180
TAAATTCCTT AATTGTTGAA CCAATTGCCC GTTTTATACT AAGTTCCTTT CAGAAACCAT	240
TTACTGGGGA AGAAGTTGAA GATTTTCAAG ATGATGATGA AATCCCAACT ATTATCTAAG	300
CCAGTCTCTG AAAGTACTAA TATTTGAAAT CCACTTCCTT TTAGGGTGCA ATGGTTATAA	360
ATGAATTTTT GAGAGGATCA GAATGAAAAA ACTAGCAACC CTTCTTTTAC TGTCTACTGT	420
AGCCCTAGCT GGGTGTAGCA GCGTCCAACG CAGTCTGCGT GGTGATGATT ATGTTGATTC	480
CAGTCTTGCT GCTGAAGAAA GTTCCAAAGT AGCTGCCCAA TCTGCCAAGG AGTTAAACGA	540
TGCTTTAACA AACGAAAACG CCAATTTCCC ACAACTATCT AAGGAAGTTG CTGAAGATGA	600
AGCCGAAGTG ATTTTCCACA CAAGCCAAGG TGATATTCGC ATTAACTCT TCCCTAAACT	660
CGCTCCTCTA GCGGTTGAAA ATTTCTCTAC TCACGCCAAA GAAGGCTACT ATAACGGTAT	720
TACCTTCCAC CGTGTCATCG ATGGCTTTAT GGTCCAAACT GGAGATCCAA AAGGGGACGG	780
TACAGGTGGT CAGTCCATCT GGCATGACAA GGATAAGACT AAAGACAAAG GAACTGGTTT	840

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CAAGAACGAG ATTACTCCTT ATTTGTATAA CATCCGTGGT GCTCTTGCTA TGGCTAATAC	900
TGGTCAACCA AACACCAATG GCAGCCAGTT CTTCATCAAC CAAACTCTA CAGATACCTC	960
TTCTAAACTC CCTACAAGCA AGTATCCACA GAAATTTATT GAAGCCTACA AAGAAGGTGG	1020
AAACCCTAGT CTAGATGGCA AACACCCAGT CTTTGGTCAA GTGATTGACG GTATGGATGT	1080
TGTGGATAAG ATTGCTAAGG CCGAAAAAGA TGAAAAAGAC AAGCCAACTA CTGCTATCAC	1140
AATCGACAGC ATCGAAGTGG TGAAAGACTA CGATTTTAAA TCTTAAAAAC CAAAAAATA	1200
CAGTATCCAC ATTCGGTACT GTATTTCTTT TACTCTCATT CTTAAGTTAA ATTATTAAAA	1260
TCCCATATTT GGTCTATCCA GCCTTCATAA AAGTCTGGCT CGTGGCAGAC CATAAGGATA	1320
GATCCCCTAT ATTCTTTGAG AGCGCGTTG AGCTCATCCT TTGCATCCAC ATCCAAATGG	1380
TTGGTCGGCT CGTCCAGCAC TAAAACGTTG TTTTCACGAT TCATCAAGAG ACAGAAACGA	1440
ACCTTGGCTT GCTCTCCCC TGATAAFACT TGAATCTGGC TTTCAATATG TTTGGTTGTC	1500
AAACCACAAC GGGCAAGGGC TGCACGACT TCTGCTTGAT TAAGGGCAGG AAAGGCATTC	1560
CAGACAGCTT CAAGAGGAGT TTGGCGATTA CCGCCTTCTA CTTCTGCTC AAAATAACCA	1620
AGTTCTAAAT AATCTCCACG CTCCACTTCC CCAGCGATTG GCGAGATAAT GCCCAAGAGA	1680
CTCTTCAAGA GAGTTGTTTT TCCAATACCA TTAGCACCAA TAATCGCAAC CTTTGTGATTG	1740
CGTTCGAAGG TAAGATTTAA AGGCTTAGTA AGAGGACGGT CGTAACCAAT TGTCAAGTTC	1800
TTGGCTTGGA AGATAAAGCG CCCTGGTGTA CGAGCTGGTT TGAAATCAAA GGATGGTTTT	1860
GGTTTCTCAC TTTGGAGTTC GATAATATCC ATCTTATCCA ATTTCTTTTG ACGAGACATA	1920
GCCATATTAC GAGTTGCAAC ACGGGCTTTA TTACGAGCCA CAAAGTCCTT GAGGTCTGCA	1980
ATCTCTTTCT GCTGGCGTTC GTAGGCTGCC TCTAGCTGAG ATTTCTTCAT AGCATAAACT	2040
TCTTGGAAC TTAGTAGTC ACCAGAGTAA CGCGTCAGCT GTTGATTTTC CACATGATAG	2100
ACAATATTAA TAACGTCATT GAGGAATGGA ATATCGTGCG AAATGAGAAC AAAGGCATTC	2160
TCATAGTTTT GGAGATAGCG CTTGAGCCAA TCAATATGCT CAGCATCCAA GTAGTTGGTC	2220
GGCTCGTCCA ACAGCAAGAT ATCAGGCTTT TCAAGGAGAA GTTTTGCCAA AAGCACCTTG	2280
GTTCTTTGCC CACCTGACAA AGAAGTTACA TCCGTATCCA TGCCAAAGTC CATAACACCA	2340
AGAGCAGCG CTACTTCGTC AATCTTAGCA TCCAAGGTAT AGAAATCACG ACTCTCCAGA	2400
CGGTCTTGAA GTTCTCCTAC TTCTTCCATG AGAGCATCAA CATCCGCGCC GTCTTCAGCC	2460
ATTTTCATAT AGAGGTCATT GATACGAGCT TCAGCTTTGA AAAGCTCATC AAAAGCCGTA	2520
CGGAGAACAT CACGCACCGA CTGTCTTTCA GCAAGGACAG AGTGCTGATC CAAGTAACCA	2580

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GCCGTACAT	ATTTGGACCA	CTCAACCTTT	CCTTCATCTG	GCAGCATTTT	ACCAGTCACG	2640
ATACTCATAA	AGGTTGATTT	TCCTTCACCA	TTGGCACCGA	CCAGGCCGAT	ATGTTCTCCC	2700
TTGAGGAGAC	GGAAGGACAC	ATCTTCAAAA	ATTGCACGGT	CACCAAAACC	GTGACTCAGA	2760
TTTTTAACTT	CTAAAATACT	CATTTTAATT	CCTTACCTTG	TTTTTATGTA	ATCGTTTATA	2820
AAGGAGCCAA	GCCAGATAGC	CACCCAAAGT	GTTGGTCCAC	AAATCATCAA	TCTCAAAGAC	2880
GCGATTGAAA	TCAAAGAAAA	AGTCCAAGAT	TAATTGCGTA	CACTCGATTC	CAAGACTCAC	2940
AAGAAAACTA	AAAAGAAGGA	CCTTTTGTGT	TTTCCGCAAA	TTTGGAATA	GATAAAGGAG	3000
TTGGAATC	AGAGGAAAAA	ACAAGAAGAC	ATTGAGGATA	TTTTGTAAAA	AAATCCAACA	3060
TAATTGTCCA	ATGTCACTCA	CTTCGCCAG	TTTCCAGAGA	GAATTGAAAG	GAGTCAAAAG	3120
AAAAACCAGG	CGTCCAAGAT	GCTGAATACC	TGGAGTTCCC	ACTCCCACGG	TAGATTGTTC	3180
TTGAGGAGTA	AAGCAAAAC	AGACAATGCA	AATGCTATAG	AAAATGACTC	CCCAGACCAA	3240
AATATGATTA	TAAGTCTTCT	TCATCATTA	GGATTTACCG	CTGCGACTGC	CTTCTGGCGG	3300
TCACGTTTCA	TTGTGTAGA	GCGCAATTGT	CCACAAGCTG	CGTCAATATC	TGTACCATGC	3360
TCTTGACGAA	CCACACAGTT	GACCCCTTTT	TTCTTAAGCG	TATCATAGAA	AGCCAACACG	3420
CACTCTTTGG	GACTACGGCT	ATATTGGTCA	TGCTCACTAA	CTGGGTATA	AGGAATCAAG	3480
TTTACATAAG	ACAATTCTTT	GATGTTCTTG	AGCAATTCAG	TCAATTCCAA	GGCTTGTTCT	3540
ACACCGTCGT	TGACTTCATT	AAGCATGATA	TATTCAAAGG	TTACACGACG	GTTTGTGTC	3600
TCAATGTAGT	ATTCAATAGC	AGCAAAGAGT	TTTTCAATCG	GAAAGGCACG	GTTAATCTTC	3660
ATGATACTTG	AACGAAGTTC	ATTGTTAGGT	GCGTGAAGAG	ACACGGCAAG	ATTGACCTGA	3720
ACCCCTTCAT	CAGCAAAGTC	ACGAATTTTA	TGAGCCAAAC	CTGAGGTGA	AACCGTGATG	3780
TGACGAGCAC	CGATAGCCAT	TCCTTTATCA	TCATTGATAG	TACGAAAGAA	ATTCAAGACA	3840
TTGTTGTAAT	TATCAAAGGG	CTCACCGATT	CCCATGACAA	CGATATGGCT	GATGCGTTCA	3900
TCCTGACCAC	GCTCATCAAA	GTATTCTGA	ACCAGCATGA	TTTGCGCTAC	GATTTCACCG	3960
TTATTGAGGT	CACGTGCTT	CTTAATCAAA	CCAGAGGCAC	AGAAGGTACA	ACCGATATTA	4020
CAGCCGACCT	GAGTGGTCAC	ACAGACAGAT	AAACCATAGT	GTTGACGCAT	GAGTACAGTC	4080
TCAATTAACA	TACCGTCGGG	CAATTCAAAG	AGATATTTGA	CTGTACCATC	AGCAGACTCT	4140
TGCACAATAC	GTTGTTTCAA	GGGATTGACC	ACAACTGGT	CATTGAGCTT	AGCAATCAAA	4200
TCCTTGAAAA	GGTTGGTCAT	TTCTTCAAA	GACTGCACAC	GTTTACGGTA	GAGCCATTCC	4260
CAGATTTGAT	CTGCACGGAA	TTTCTTTTCT	CCCTGCTCCA	ATACCCATTC	CTGCATGGTT	4320
TGATGTACCA	AACTATGAAT	TGAGGGTTTC	ATTTCTTCTC	CTTATTCTCT	ACTCACTTCT	4380

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GACGAATGAC AAAATGACGT TGTCCCTTGT CGTCTTTCTG ACGACGTCTA TTTTCTTAT 4440  
 CTGCATTGCGA CTTTCGTTTA GTTTGAGTCG GTTTCCTTCC TTTTCTAGAA GGTGTTTCTT 4500  
 CTTCCGTCTT ACGCATTTTC TTGTCAAATG ATGCTCGCTT AGGGGCTTCA TTTTCTAAGA 4560  
 CAAAATAGGC ACAACCATAA CTACAATACT CTAAAAGGTA GTCTTGTAAG CGACTGATTT 4620  
 TTTCAGTTT TTCTTCTGTT CGGTCATCCT TGTAAAAACC TCGTAGGCGA AGCTGTTCTG 4680  
 TGCTCCAGTC CCCCACGATA TAATCAAACCT TGGTTAATAC TTCTGAAAAA CGCTGATTAA 4740  
 AAGTCGTAC ATCAAAGGCA TCCTTGATAT TTTCAACCAA GGAAAAAGCT ATCCCTTCCG 4800  
 TTTCGACCTT GTCCCGTGT AAATGGAACCT CCGGACCAGG AAAGTTGTTA TAGTTGTATA 4860  
 ATTCAGGTGC AATTCTTTT CGCATAGATA TCCTTTTTTC ACGATTACTT AATACTTTAT 4920  
 TCTACCATAA TTTCTAGCAG TTAGCACGTT TCTCATAAAA ATGAAAAAAG TCTGACGATT 4980  
 TTGTGACACC AGAATCTTAT AACCTAAAAA GAGAAGAACA ATTCTTCCCT CCAACTATCA 5040  
 TTATTTAGCA GCTGCGTACA ATTCATCTAC TTTATTCAG TTGATTACTG AAAAGAAAGC 5100  
 TTTGATGTAG TCAGGACGCA CGTTGCGGTA TTTACGTCAG TAAGCATGTT CCCAAACGTC 5160  
 CAAGCCCAAG ATTGGTTTTT TACCTTCTGA GATTGGTGTG TCTTGGTTTG CTGTTGAAGT 5220  
 CACTTCAAGT TTCCTTCTT TGTGACAAC CAACCATGCC CAACCTGAAC CAAAACGAGT 5280  
 TGTGCTGCT GCAGTGAAGG CTGCTTGAA TTTCTCAAAT GAACCAAATG TTGCATCGAT 5340  
 TGCTGCTGCC AGTTCTGCTG AAGGAGCTGT TTTCTCGGGA GTCATCAATT CCCAGAAAAG 5400  
 AGCGTGGTTC AAGTGTCGC CACCATTGTT GATAAGTGCT TGACGGATAT CAGCTGGGAT 5460  
 AGATTCTACA TCAGCAAGCA AGGCTTCAAG GTCTTCACCG ATTTCAGGGT GTTTTCTAA 5520  
 AGCTGCATTG GCATTGTTGA CATAAGTTG ATGGTGTT 5558

(2) INFORMATION FOR SEQ ID NO: 104:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 6735 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 104:

GGAATTGTAA ATATCATATT GTTTTGCAC CCAATATCG TCGTCAAATC ATTTATGGCA 60  
 GATACAAAGC TAGTATCGGA AGAATCATAC GTGACTTATG TGAGCGTAAG GGTGTAATAA 120  
 TCCATGAAGC GAATGCTTGT TCAGACCATA TTCACATGCT TATCAGTATT CCTCCGAAAC 180

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TTAGTGTTC	GTCCTTTATG	GGCTATTTAA	AGGGCAAGAG	CAGTTTGATG	ATTTTGTGATA 240
AGCATGCGAA	TTTAAATAC	AAATATGGCA	ATCGCAAGTT	TTGGTGTAGA	GGCTATTATG 300
TAGATACGGT	AGGCCGTAAT	CAGAAAGTGA	TAGCTGAATA	TATTCAGAAT	CAATTACAAG 360
AAGACAGAGT	AGCAGACCAG	CTCACGTTAT	TCGAGTCAGT	AGATCCGTTT	ACTGGCGAAA 420
TAAATAAGAG	GAAGTAACTA	AGGTGCTTTA	GCACCTGCTC	GGGAAAGTGG	TGCGCGAGGA 480
AGCTATTTTCG	GTGGGCCTTT	GGCCCTGGCC	GGTAGAAGCG	GCTTATAGCC	GCAGAACAAA 540
CCACCAGTTC	ACACTGGTGG	TTTTGATTTA	AAAACTTGA	TACATAAAAA	TAAAAGTCTA 600
TATAAAGGAT	GGTAAATTC	CTGTTGTCCG	ATTTGGACAA	TATCCTAAAT	AGTTACAATA 660
TATGGTCTAT	ACTTTTCTT	AGGAGAAAGC	TAGATGTACA	GACGTTTGAG	AGATTTGAGG 720
GAGGATCATG	ATCTGCCCCA	AAAGCAAATA	GCTACAATAC	TTTCGTTTAC	AAATTCAGCT 780
TATGCCAAAA	TTGAACGGGG	TGAGCATGCG	TTGACGGCTG	ATGTATTGGT	TAAACTCTCA 840
GATTTCTATG	ACGTCAGTAC	AGACTATTTA	TTGGGATTAA	CTGATTTTCC	TGATAAAATT 900
CGCTTTAGAA	AATAATCTCC	TCAATTTTCAT	AGAGTTTGAA	AATGAGTGAG	ATTTTTTATT 960
TGCCCTTTGA	CAACTGAATA	GCCTAAAATG	GTACTTTCCT	CATTTGTGGA	GCAAATTTGA 1020
ATGGCTCGCC	ATGATAAGAG	CGATTTTAAA	ATCATCAATA	AAATAGAGCG	ATACTTTATA 1080
TGCCATGATA	CAAATGATAT	ACAATGATAC	TTCTGACCGT	TCAGCCTGCC	AACGTAAAAG 1140
AGCAGCAAGT	GAAATCTTGA	TGATGACTTC	ATCAGTCATG	CCACGTTGAA	TGTGTGAGTT 1200
TGTTAGATAA	ACGCAATTAA	TCCTCAAAAG	GTTCCCGGAA	CCTTTTGAGT	TCTACAGACG 1260
CATCACGTGG	AGTGTGTAAG	CTTGTTGCTA	AAAGCGTAAA	AACCTTGGAA	CGAAAGGAAT 1320
AATAGACTTT	CTGCGAAACA	AAAATATAAT	ACAATAAAAC	TATGAATGAT	GAAGCAAGTA 1380
AACAATTGAG	CGATAGCCGT	TTCAAGATCC	TTGTAGGTGT	TCAGCGCACG	ACTTTTGAAG 1440
AGATGTTAGC	TGTGTTAAAA	ACAGCTTATC	AACGTAACG	CGCAAAGGT	GGACGAAAAA 1500
GCAAATTAAG	CCTAGACGAT	CTCCTTATGG	TAACATTTCA	ATACATGCGA	GAATAGAGCA 1560
CTTATGAACA	AATTGCGGCT	GATTTTGGCA	TTCACGAAAG	CAACTTAATC	CGTCGGAGTC 1620
AATGGGTTGA	AGCAACTCTT	ATTCAAAATG	GTTTTACGAT	TTCAAATTCT	GCCTTAATTC 1680
TGTAAAAACA	GTAAATTCG	AAGGATTGTA	AGGTAAGAGT	TTTTTTCTTT	CTGAAAAAAT 1740
GGTATAATAG	CAATCAAAAC	TAGAAAAATA	AACGGAATTT	GGAACAGATT	TGTCTGTATC 1800
CTAGTAGAGT	GGTGATACTA	TGAAGATTAG	TAAGAGGCAC	TTATTAAATT	ATTCCATCTT 1860
GATTCCTTAC	TTGCTTTTAT	CTATTTTGGG	CTTGATTGTG	GTCTATTCGA	CCACCAGTGC 1920
TATTTTAATT	GAAGAAGGCA	AGAGCGCCTT	GCAGTTGGTT	CGAAACCAAG	GAATCTTTTG 1980

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GATTGTTAGT TTGATACTGA TTGCCTTAAT TTATAAATTG AGACTAGATT TTTTGAGAAA	2040
TGAGCGACTA ATCATTTTAG TTATATTAAT AGAAATGCCTT TTATTGTTCT TGGCTCGTTT	2100
TATTGGTATT TCCGTAAACG GGGCATAACG TTGGATTTCG GTTGCAGGAA TAACTATTCA	2160
GCCAGCTGAG TACTTAAAAA TCATTATTAT TTGGTATTTA GCTCACCGAT TCTCCAAACA	2220
GCAAGAAGAA ATAGCTACTT ATGATTTTCA AGTTTGTACT CAAAATCAAT GGCTTCCCCG	2280
TGCTTTTAAT GATTGGCGAT TCGTTCTCCT AGTTCGTATT GGAAGTTTGG GAATTTTCCC	2340
TGATTTAGGA AATGCGACTA TTTTAGTCTT GGTTCCTTG ATTATGTATA CAGTTAGTGG	2400
AATCGCTTAT CGCTGGTTTT CAACCATCTT GGCCTCGTA TCTGCCGCTT CTGTCTTTGT	2460
CTTGACCACT ATCAGCCTAA TCGGTGTTGA GACCTTTTCA AAAATTCCAG TATTCGGCTA	2520
TGTAGCCAAG CGCTTTAGTG CCTTTTTTAA TCCTTTTGCC GATCGTGCTG ATGCAGGTCA	2580
CCAGTTAGCT AATTCTTATT TTGCCATGGT CAATGGCGGT TGGTTTGGTC TAGGTCTTGG	2640
AAACTCGATT GAAAAACGAG GTTATTTGCC AGAAGCTCAT ACAGACTTTG TCTTTTCTAT	2700
CGTGATTGAA GAATTTGGCT TTGTTGGTGC CAGTCTTATT TTAGCTCTCT TGTTTTTCAT	2760
GATTTTGCGG ATTATCTTGG TCGGTATCCG AGCGGAGAAT CCTTTCATG CCATGGTTGC	2820
ACTCGGTGTC GGAGGGATGA TGTTGGTTCA GGTATTTGTC AATATCGGAG GGATTTCCGG	2880
CTTGATTCCA TCTACAGGAG TGACTTTCCC CTCTTATCC CAGGGTGGAA ATAGTCTTCT	2940
AGTCTTATCA GTGGCAGTAG CCTTGTCTT AAATATTGAT GCCAGTGAAA AACGCGCTAA	3000
ATTGTACCGA GAATTGGAAA ATCAACCAAT GAACCTTCTG TTGAAGTAGG ATAAAGAAAG	3060
GATAGTTTAT GTCTCTTCAA AAATTAGAAA ATTATAGTAA TAAAAGTGTT GTGCAAGAAG	3120
AAGTCTTGAT TCTAACAGAA TTACTGGAAG ATATTACTAA AAATATGCTT GCCCCAGAGA	3180
CCTTTGAAAA AATAATACAG TTGAAAGAAT TATCAACGCA GGAAGATTAT CAAGGTCTAA	3240
ACCGTCTAGT GACTAGCTTA TCAAATGATG AAATGGTCTA TATTTACGC TATTTCTCTA	3300
TCTTGCCTCT TTTGATTAAT ATTTAGAGG ATGTGGATTT AGCTTATGAA ATCAATCATC	3360
AAAATAATAT TGATCAGGAC TATTTAGGTA AATTATCTAC AACGATTAAA TTGGTAGCAG	3420
AAAAGGAAAA TGCCGTTGAG ATCCTAGAAC ACTTGAATGT TGTCCCTGTT TTGACAGCCC	3480
ATCCAACACA AGTGCAACGC AAAAGTATGT TGGATTTAAC AAATCATATT CATAGTCTTT	3540
TGCGTAAATA CCGTGATGTT AAGTTGGGGT TGATCAATAA AGATAAATGG TACAATGATT	3600
TGCGTCGTTA CATCGAAATT ATCATGCAGA CAGACATGAT TCGTGAGAAA AAATTAAAAG	3660
TGACTAACGA AATCACGAAT GCTATGGAAT ATTATAACAG CTCCTTTTGT AAAGCTGTAC	3720

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CTCATTTGAC	GACGGAGTAT	AAGCGCTTAG	CGCAAGCGCA	TGGTCTGAAT	TTAAAACAGG	3780
CTAAACCAAT	CACCATGGGT	ATGTGGATAG	GTGGTGACCG	TGATGGAAAT	CCATTTGTTA	3840
CAGCAAAGAC	CTTGAAGCAG	TCTGCACTCA	CTCAGTGTGA	AGTCATCATG	AACTACTATG	3900
ATAAAAAGAT	TTACCAACTT	TATCGTGAAT	TTTCTCTTTC	AACTAGCATT	GTCAACGTCA	3960
GCAAGCAAGT	CAGAGAAATG	GCTCGTCAAT	CCAAGGATAA	CTCGATTTAC	CGCGAAAAAG	4020
AGCTTTACCG	TCGTGCCTTG	TTTGATATTC	AATCAAAAAT	TCAGGCAACT	AAAACCTATC	4080
TGATTGAGGA	TGAAGAAGTT	GGGACTCGTT	ATGAAACCGC	CAATGATTTC	TACAAGGATT	4140
TGATTGCCAT	TCGAGATTCT	CTACTAGAAA	ATAAGGGCGA	GTCTTTGATT	TCAGGTGATT	4200
TTGTGGAATT	ATTGCAGGCA	GTAGAGATAT	TTGGTTTTTA	CTTAGCATCA	ATTGATATGC	4260
GACAAGACTC	TAGCGTCTAT	GAAGCCTGTG	TGGCAGAACT	CTTGAAATCA	GCAGGAATTC	4320
ATTCTCGTTA	TAGCGAGTTG	AGCGAAGAAG	AAAAGTGTGA	CCTTCTCTTG	AAAGAATTAG	4380
AAGAAGATCC	CCGAATTCCT	TCTGCGACTC	ACGCAGAAAA	ATCAGAATTA	TTAGCAAAAG	4440
AATTAGCTAT	TTTTAAGACG	GCTCGTGTTT	TGAAAGATAA	GTTGGGAGAT	GATGTCATCC	4500
GTCAGACCAT	CATTCACAT	GCAACCAGCC	TTTCTGATAT	GCTAGAATTA	GCTATCTCTG	4560
TAAAAGAAGT	AGGACTGGTG	GATACGAAA	GGGCGCGTGT	TCAGATTGTT	CCCCTTTTTG	4620
AAACAATTGA	AGACTTGGAT	CATTCAGAGG	AAACAATGAG	AAAATATCTT	TCTCTTAGCC	4680
TTGCCAAAAA	ATGGATTGAC	TCACGAAATA	ACTACCAAGA	AATCATGCTT	GGCTACTCTG	4740
ACAGTAATAA	AGATGGCGGT	TACTTGTCAT	CATGTTGGAC	CCTCTACAAG	GCTCAACAAC	4800
AATTGACTGC	TATTGGAGAT	GAATTTGGCG	TTAAGGTTAC	CTTCTTCCAT	GGTCGTGGTG	4860
GTACTGTCGG	TCGTGGTGGT	GGGCCAACCT	ATGAAGCCAT	TACATCTCAA	CCGCTCAAGT	4920
CTATCAAGGA	TCGTATCCGC	TTGACGGAGC	AGGGTGAAGT	AATTGGGAAT	AAATACGGTA	4980
ACAAAGACGC	CGCTTACTAT	AACCTTGAAA	TGCTAGTATC	GGCAGCTATT	AACCGTATGA	5040
TTACTCAGAA	GAAGAGCGAT	ACCAATACCC	CAAATCGTTA	TGAAACCAT	ATGGATCAAG	5100
TAGTGGACCG	TAGTTACGAT	ATCTACCGTG	ATTTGGTCTT	TGGTAATGAG	CATTTCTATG	5160
ATTATTTCTT	CGAGTCAAGT	CCAATCAAGG	CTATTTCAAG	TTTAAATATT	GGTTCTCGTC	5220
CAGCCGCTCG	TAAGACTATT	ACTGAAATCG	GTGGTTTGCG	TGCCATCCCT	TGGGTATTCT	5280
CATGGTCACA	GAGTCGTGTT	ATGTTCCCTG	GATGGTACGG	GGTTGGTTCA	AGCTTCAAGG	5340
AATTTATCAA	TAAAAATCCA	GAGAATATTG	CTATCTTACG	AGATATGTAC	CAAAATTGGC	5400
CTTCTTTCCA	ATCGCTTCTT	TCAAATGTTG	ATATGGTTTT	GTCAAAATCA	AATATGAATA	5460
TTGCTTTTGA	ATATGCTAAA	CTTTGTGAAG	ACGAGCAAGT	TAAGGCCATC	TATGAGACTA	5520



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TTTTAAATGA ATGGCAAGTT ACTAAGAACG TTATCTTGGC TATTGAAGGA CATGACGAAC      5580
TCTTAGCTGA CAATCCATAT CTAAAAGCTA GTCTGGATTA CCGTATGCCT TACTTTAATA      5640
TTCTCAACTA TATTCAGTTG GAGTTGATTA AACGCCAACG TCGTGGAGAA TTGTCCAGTG      5700
ATCAAGAACG ATTGATTCAT ATCACCATCA ACGGAATTGC GACAGGATTG CGTAATTCAG      5760
GTTGATAATT TTCAAGAGTG AATGCTAAAA GTGAATATCA AAAAAATTCT AATAGACTAT      5820
TGACAAGTAG TTTAAAAATG ATATAATTTA ACCATTCAGA AAAGTAATCA TACAAACTTT      5880
TTAGAGAGTC TGTGGTAGCT GAAAACAGAT AAGTGGCAAT GATGAAAATT GGGCTGAATG      5940
CTATTTAGAA TTTGAAATTA TAAAAATTCG GTAAGCACAC CTTACAGTGC ATCTCGTTAT      6000
TGCGAGACTG AGCGATAGGG AAATTCCTTA TAATTGAGGT GGTACCGCGC ATCGACGTCC      6060
TCACACAAGT TTTTGTGTG AGGATTTTTT TGATGGAGGT TAGTATGGAA AGAAAACGAT      6120
GGCGTCGCTT GTTTAGATAA GTGAAATATG TTAAAGGAAA TAAAAAGGAG AAACAGAATG      6180
AAAAATAAAC GTTTAATTGG AATTATTGCT GCATTAGCAG TCTTAGTAGC AGGAAGCTTG      6240
ATTTATCTTT CAATGAATAA ATCAGAAGCT CAGAATAATA AGGATGAGAA GAAAAAACC      6300
AAGATTGGTG TGCTTCAATT TGTGAGCCAT CCATCCCTTG ATTTGATTTA TAAAGGGATC      6360
CAAGATGGAC TTGCAGAAGA AGGATATAAA GATGATCAAG TTAAAAATTGA TTTTATGAAC      6420
TCAGAAGGTG ACCAAAGTAA GTTTGCAGCA ATGAGTAAAC AATTGGTTGC AAATGGGAAT      6480
GACCTTGTGG TTGGTATCGC AACACCAGCA GCCCAAGGGT TGGCTAGTGC AACAAAAGAC      6540
CTACCGGTTA TCATGGCCGC TATTACAGAC CCAATTGGTG CTAAGTTGGT TAAAGATTG      6600
AAAAAACGAG GTGGCAACGT TACAGGGGTA TCTGACCACA ATCCAGCTCA ACAACAAGTT      6660
GAACTCATCA AGGCTCTGAC ACCGAATGTG AAAACAATCG GAGCTCTTTA CTCAAGTAGC      6720
GAAGACAATT CAAAAA                                     6735

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(2) INFORMATION FOR SEQ ID NO: 105:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 6516 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 105:

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CTAGAGGATC CCAGCAGGTA AATTGGCTTC AGCTGGCAAA AAAGTTGCCC TCGTTGAACG      60
CAGCAAGGCT ATGTACGGTG GAACTTGTAT CAACATTGGT TGTATCCCAA CTAAAAACCTT      120

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GCTAGTTGCT	GCTGAAAAGG	ACTTGTCTTT	TGAAGAAGTC	ATTGCTACTA	AAAACACGAT	180
CACTGGTCGC	CTCAACGGTA	AAAACATATGC	GACTGTTGCT	GGTACAGGCG	TAGATATCTT	240
TGATGCGGAA	GCTCACTTCC	TTTCAAATAA	AGTCATCGAA	ATCCAAGCTG	GTGATGAAAA	300
GAAAGAAGCTG	ACTGCTGAAA	CAATCGTCAT	CAACACTGGT	GCTGTTTCAA	ACGTCTTGCC	360
AATCCCTGGA	CTTGCTACAA	GCAAAAACAT	CTTTGACTCA	ACAGGTATCC	AAAGCTTGGA	420
CAAATTACCT	GAAAAACTTG	GAATCCTTGG	TGGCGGAAAT	ATCGGTCTTG	AATTTGCCGG	480
CCTTTACAAC	AAACTTGGA	GCAAGGTCAC	AGTCCTAGAT	GCCTTGGATA	CATTCTTACC	540
TCGTGCAGAA	CCTTCCATCG	CAGCTCTTGC	TAAACAATAC	ATGGAAGAAG	ATGGCATTGA	600
ATTGCTTCAA	AATATCCATA	CTACTGAAAT	CAAAAACGAT	GGTGACCAAG	TGCTTGTCGT	660
AACTGAAGAC	GAAACTTACC	GTTTCGACGC	CCTTCTCTAC	GCAACTGGAC	GCAAACCAAA	720
TGTAGAACCA	CTTCAACTTG	AAAATACAGA	TATTGAACTA	ACTGAACGTG	GTGCTATTAA	780
AGTAGACAAA	CACTGTCAAA	CAAACGTTCC	TGGTGTCTTT	GCAGTTGGAG	ATGTCAACGG	840
TGGCCTTCAA	TTTACTTACA	TTTCACTTGA	TGACTTCCGT	GTGTGTTTACA	GCTACCTTGC	900
TGGAGATGGC	AGCTATACAC	TTGAAGACCG	TCTCAATGTG	CCAAATACTA	TGTTTCATCAC	960
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CGCTGTTAAG	GAAATCCCCG	TTGCAGCAAT	GCCTCGTGGT	CACGTAAATG	GAGACCTTCG	1080
CGGTGCCTTC	AAAGCTGTTG	TCAATACTGA	AACAAAAGAA	ATTCTTGGAG	CAAGCATCTT	1140
CTCAGAAGGT	TCTCAAGAAA	TCATCAACAT	CATCACTGTT	GCTATGGACA	ACAAGATTCC	1200
TTACACTTAC	TTCAACAAAAC	AAATCTTCAC	TCACCCAACC	TTGGCTGAGA	ACTTGAATGA	1260
CTTGTTTGCG	ATTTAAGTTG	AGATTTAATC	GTATCGAACA	GCCCTCTTTG	GGCTGTTTTT	1320
ACTTCTGCGG	AATCTCAAAT	CTGTCTTTCT	CCTCTTTTAT	GATATAATAG	AAACATGAAC	1380
TTAAAAACTA	CTTTGGGCCT	TCTTGCTGGG	CGTTCTTCCC	ACTTCGTTTT	AAGCCGTCTT	1440
GGACGTGGAA	GTACGCTCCC	AGGGAAAGTC	GCCCTTCAAT	TTGATAAAGA	TATTTTACAA	1500
AACCTAGCTA	AGAACTACGA	GATTGTCGTT	GTCACGGAA	CAAATGGAAA	AACCTGACA	1560
ACTGCCCTCA	CTGTCGGCAT	TTTAAAAGAG	GTTTATGGTC	AAGTTCTAAC	CAACCAAGC	1620
GGTGCCAACA	TGATTACAGG	GATTGCAACA	ACCTTCCTAA	CAGCCAAATC	TTCTAAAAC	1680
GGGAAAAATA	TTGCCGTCCT	CGAAATTGAC	GAAGCCAGTC	TATCTCGTAT	CTGTGACTAT	1740
ATCCAGCCTA	GTCTTTTTGT	CATTACTAAT	ATCTTCCGTG	ACCAGATGGA	CCGTTTCGGT	1800
GAAATCTATA	CTACCTATAA	CATGATATTG	GATGCCATTC	GGAAAGTTCC	AACTGCTACT	1860
GTTCTCCTTA	ACGGAGACAG	TCCACTTTTC	TACAAGCCAA	CTATTCCAAA	CCCTATAGAG	1920

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TATTTTGGTT	TTGACTTGGA	AAAGGGACCA	GCCCAACTGG	CTCACTACAA	TACCGAAGGG	1980
ATTCTCTGTC	CTGACTGCCA	AGGCATCCTC	AAATATGAGC	ATAATACCTA	TGCAAACTTG	2040
GGTGCCTATA	TCTGTGAAGG	TTGTGGATGT	AAACGTCCTG	ATCTCGACTA	TCGTTTGACA	2100
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ATCCAAATCG	GCGGGCTCTA	TAATATCTAT	AACGCCCTAG	CTGCTGTGGC	CATCGCCCGT	2220
TTCCTAGGTG	CCGATTTCGA	ACTCATCAA	CAGGGATTTG	ACAAGAGCCG	TGCTGTCTTT	2280
GGACGCCAAG	AAACCTTTCA	TATCGGTGAC	AAGGAATGTA	CCCTTGTCCT	GATTAAAAAT	2340
CCAGTCGGTG	CAACCCAAGC	TATCGAAATG	ATCAAACCTAG	CACCTTATCC	ATTTAGCCTA	2400
TCTGTCCTCC	TTAATGCCAA	CTATGCAGAT	GGAATTGACA	CTAGCTGGAT	CTGGGATGCA	2460
GACTTTGAAC	AAATCACTGA	CATGGACATT	CCTGAAATCA	ACGCTGGCGG	TGTTTCGTCAT	2520
TCTGAAATCG	CTCGTCGCCT	CCGAGTGACT	GGCTATCCAG	CTGAGAAAAT	CACTGAAACG	2580
AGTAATCTGG	AGCAAGTTCT	CAAGACCATT	GAGAATCAAG	ACTGCAAGCA	TGCCTATATT	2640
CTGGCAACTT	ATACTGCCAT	GCTGGAATTT	CGTGAACCTG	TGGCTAGTCG	TCAGATTGTT	2700
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ATCAGCTCAA	CATTGCCCAC	CTCTACGGAA	ATCTCATGAA	TACTACGGGG	ACAATGGAAA	2820
CATCCTCATG	CTCAAGTATG	TGGCTGAAAA	ACTGGGAGCC	CATGTGACCG	TTGACATCGT	2880
TTCTCTCCAT	GATGACTTTG	ATGAAAATCA	CTACGACATC	GCCTTTTTCG	GTGGTGGTCA	2940
AGACTTTGAA	CAAAGTATCA	TTGCAGACGA	CCTACCTGCT	AAAAAAGAGA	GCATTGACAA	3000
CTACATCCAA	AACGACGGTG	TAGTTCTGGC	TATCTGCGGT	GGTTTCCAAC	TATTGGGTCA	3060
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GCTCAACCAG	ACCAATAAACC	GTTTTATCGG	TGACATCAAG	ATTCACAATG	AAGATTTCGA	3180
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ACCGCTGGGA	CAGGTTGTCT	ATGGAAATGG	AAACAACGAA	GAAAAGGTCG	GTGAAGGGGT	3300
TCATTATAAG	AATGTCTTTG	GTTCTACTT	CCACGGGCCT	ATCCTCTCTC	GTAATGCCAA	3360
TCTGGCTTAT	CGCCTAGTTA	CTACTGCCCT	CAAGAAGAAA	TATGGTCAGG	ACATCCAACT	3420
CCCTGCCTAT	GAGGACATTC	TCAGCCAAGA	AATCGCTGAA	GAGTACAGTG	ACGTCAAAAAG	3480
CAAGGCTGAC	TTTTCTTAAA	CAAAGGAAAA	TGATATCAAA	GAATCCGTT	ATCTTGTCGG	3540
AGTTTTTTGT	CTTTTCTTTT	ACCTTCTCTC	CTTGCAATTT	CTCTCATTTT	TTGCCAAAAT	3600
AGAGGGGTAG	AAAGAAGGTA	GCATATGTCT	AAATTACAAC	AAATCCTAAC	ATATCTTGAA	3660

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TCAGAAAAAC	TAGACGTCGC	TGTCGTATCT	GACCCCGTCA	CAATCAATTA	CCTCACTGGT	3720
TTTTACAGTG	ATCCCCATGA	ACGCCAAATG	TTCCTCTTTG	TCCTAGCAGA	TCAGGAACCT	3780
CTCCTCTTTG	TCCCAGCTCT	TGAAGTAGAA	CGTGCAAGTA	GCACCGTTTC	CTTCCCAGTA	3840
GTGGGCTATG	TCGATTCTGA	AAATCCATGG	CAAAAAATCA	AACATGCTCT	TCCACAAC TT	3900
GACTTCAAAC	GTGTCGCTGT	TGAGTTTGAC	AATCTCATCT	TGACCAAATA	CCATGGTTTG	3960
AAAACAGTTT	TTGAGACTGC	TGAGTTTGAC	AACCTCACTC	CTCGTATCCA	ACGCATGCGC	4020
CTCATCAAAT	CAGCTGATGA	AGTGCAAAAA	ATGATGGTTG	CAGGTCTTTA	TGCTGACAAG	4080
GCTGTTCATG	TTGGTTTTGA	CAATATTTCT	CTTGATAAGA	CTGAGACAGA	TATCATCGCA	4140
CAAATCGACT	TTGCCATGAA	ACGTGAAGGT	TATGAAATGA	GCTTTGATAC	CATGGTCTTG	4200
ACTGGTGATA	ATGCTGCGAA	TCCACACGGC	ATTCCAGCAG	CTAATAAGGT	TGAAAATGAT	4260
GCTCTTCTCC	TCTTTGACCT	GGGTGTTCTG	GTCAATGGCT	ATGCGTCAGA	TATGACTCGT	4320
ACAGTCGCTG	TCGGCAAACC	AGACCAATTC	AAGAAAGATA	TTTACAAC TT	GACTCTTGAA	4380
GCCCAACAAG	CTGCTCTTGA	CTTTATCAAG	CCAGGTGTGA	CTGCTCATGA	AGTGGACCGC	4440
GCTGCCCGTG	AGGTCATCGA	AAAAGCTGGT	TATGGTGAGT	ACTTCAACCA	CCGTCTCGGG	4500
CATGGTATCG	GTATGGATGT	CCATGAATTC	CCATCTATCA	TGGAAGGAAA	CGACATGGTC	4560
ATCGAAGAAG	GCATGTGCTT	CTCTGTTGAA	CCAGGTATCT	ATATCCCTGG	TAAAGTCGGT	4620
GTTCGTATTG	AAGACTGCGG	TGTTGTTACC	AAGGATGGCT	TCAACCTCTT	TACAAGCACC	4680
AGCAAAGATT	TGCTTTATTT	TGATTAAACT	ATATAGCCCC	TATGCTTTCC	TTTCAAAATA	4740
TCTAGGGGCT	ATTTTATTGT	CATTTTCTG	CTATTATGCT	AAAGAAATTG	GCTGCAATAA	4800
TCTAACCCTA	AGTGTCTGGA	ATGATAACGA	GGGTGCTCTC	CGCTTTTATC	AAAGACAAGG	4860
GATGAAACCC	CAAGAAACAA	CAATGGAAAT	GATAATTGAT	TAAGAAGTCA	TCTATCAAAA	4920
GATGTTAGAA	AAAGTTCAAT	TTCACTAGAA	AATGAGGAAA	ATCTCCCCAC	AATAAAACGC	4980
ATAGTATCAG	GTATTGTGTA	CTGACCCCAA	ACAGTTAGAC	AATTAATTTA	TCCGAAGGAT	5040
TTAGTTCTGT	ACTGCACAGG	ACTAAGTCCT	TTTAGTTTTA	CCTTAATTCG	TTTGTTGTTG	5100
TAGTAATCAA	TATAGTCTAT	AATGACTTGT	TCCAATTGGT	TAAGTGATTT	AAATGTTTTC	5160
TCATAGCCAT	AAAACATTTT	GGATTTTAAA	ATGCCAAAGA	AAGATTCCAT	CATACCGTTG	5220
TCTTGGCTGT	TTCCCTTGCG	TGACATAGAT	GCTTGAATTC	CCTTATTCTC	TAGGAACCGA	5280
TGATAAGAAT	CGTGTGGTA	TTGCCAGCCT	TGGTCACTAT	GGAGAATCGT	ATTCTCGTAG	5340
TGCTTCTCTT	TGAATGCCTG	TTCCAACATT	GTTTGTACTT	ATTCTAAATT	AGGCGAACAA	5400
GAAAGATTAA	AAGCAATAAT	TTCGCTGTTA	AAGCCATCTA	AAACTGGTGA	TAAGTAAAGC	5460

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TTAGAGCCTT CAAATTGGGC TTGAATGAGA TTCTCTGCCT TCTTACCAAC GTCTCCTTTA      5580
TGAGAAGAAT ATTTTCGTTT CTTTCGCATT TTAGCTTGTA AATTGAGTAC TTTCATCAAG      5640
CCTTGAAGTC TTTTATGATT TACCAGATAA CCACGATTTC TTAGTTCTAA ATGAACCCGG      5700
CGATAAGCAT AATTTCCCTT GTGTTCGATA AAGATGGATT GAATTTTCAGT TTTAAGCTCT      5760
TGGTCTTTAT CTGTTTTGTC TAGCTGTTTC AAGTGATAGT AGTAGGTCCA ACGAGCTAGT      5820
TTAATGGCTT CTAGAAGAAG ATCTAACGAA AACTCAGTCA TTAATTCCTG AACAATTTCT      5880
GTCTTCTTTC TTTCTCTTTT TCCTCCTTCA ATCGGAGTTC TCTTAACCTT TTTAGGATGG      5940
CATTCTCCGC TCTCAGGTAC TCTCCCTCTT GTTTTCTCAA CAATAGTATA CCCGTTTTTC      6000
CTGTATTGTG CTAGCCAGTT AAGAAGTATC GTACGACTTG GGAGACCGTA TTCAAGAGAA      6060
ACTCTATCTT TAGTCCAGCC TTCATGTCAG ACTTTATTAA CCCCAATTAT TCACCCCAAA      6120
TCTAAAAACC ATCCAGAATC CTTGCCTTAG CTTAGATCCT GGATGGTTTC TTTTTCACC      6180
CAATGGGTGT TTTTACTAG AAAAAAAGA GTTTCCCCTT TATGGTATAA GTGTAGAAAA      6240
AAACACAAAA AGAAAGGAAA CTCACATGAA CAGTTTACCA AATCATCACT TCCAAAACAA      6300
GTCTTTTAC CAACTATCTT TCGATGGAGG TCATTTAACC CAGTATGGTG GTCTTATCTT      6360
TTTTTCAGGAA CTTTTTCCC AGTTGAACT AAAAGAGCGG ATTTCTAAGT ATTTAGTAAC      6420
GAATGAmCAA CGCCGCTACT GTCGTTATTC GGATTCAGAT ATCCwTGTCC AGTTCCTCTT      6480
TCAACTGTTA ACAGGTTATG GAACGGAATA TGCTTG      6516

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(2) INFORMATION FOR SEQ ID NO: 106:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 14654 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 106:

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TCTCTACTTG TTTTCTATAT CATTTTCATC CATAGAAAAC AACTCATCCA CTGGGACAT      120
ATCTTTAGCT ATACTGTTTCG ATACTCTCTC TTTTCACTTT CCTTTGTAGC AATTTATTTC      180
CTGATTAATT TCGTGTATCC TGTAGATATG GTCATTAATT TGCCATTTT GATTAATACT      240
GGTTTGATTG TCTTGCTATC AGCTATCTCT TATATTAGTC TACTTGCTCT CACAAAAGAT      300

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AGCATTTTCT	ATGAATTTT	AAACCATGTC	CTAGCCTTAA	AAAATAAAAT	TAAAAAATCA	360
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TTGGATTATA	TTGATACTCT	CTGTAAAAAG	CACAATATCA	ACTATATTAT	TAACTACGGT	480
ACTCTGATTG	GGGCGGTTCG	ACATGAGGGC	TTTATCCCTT	GGGACGACGA	TATTGATCTG	540
TCCATGCCTA	GAGAAGACTA	CCAACGATTT	ATTAAACATTT	TTCAAAAGGA	AAAAAGCAAG	600
TATAAGCTCC	TATCCTTAGA	AACTGATAAG	AACTACTTTA	ACAACTTTAT	CAAGATAACC	660
GACAGTACGA	CTAAAATTAT	TGATACTCGA	AATACAAAAA	CCTATGAGTC	TGGTATCTTT	720
ATCGATATTT	TCCCTATAGA	TCGCTTTGAT	GATCCTAAGG	TCATTGATAC	TTGTTATAAA	780
CTGGAAAGCT	TCAAACCTGCT	GTCTTTCAGT	AAACATAAAA	ATATTGTCTA	TAAGGATAGC	840
CTTTTAAAAAG	ATTGGATACG	AACAGCCTTC	TGGTTACTCC	TTCGACCGGT	TTCTCCTCGT	900
TATTTTGCAA	ATAAAATCGA	GAAAGAAATT	CAAAAATATA	GTCGTGAAAA	TGGGCAATAT	960
ATGGCTTTTA	TCCCTTCAAA	ATTTAAGGAA	AAGGAAGTCT	TCCCAAGTGG	TACCTTTGAT	1020
AAAACAATCG	ATTTACCCTT	TGAGAATTTA	AGCCTTCCTG	CACCTGAAAA	ATTTGATACT	1080
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GATTATTGAA	GAAGAAAATC	ACCCTCGCTA	CAAGGTTCTT	TCCTACGATA	CATCTTCTTG	1440
GTACTTCCAT	AATTTTCGCAT	CGATTTTGA	CACCTTCTACT	GTTATAGAAG	ACCATGTTAA	1500
GTACAAGCGT	CATGATACCA	GCCTTTTCAT	CGATGTCTTC	CCAATTGATC	GATTTACAGA	1560
CTTGAGCATT	GTCGACAAGA	GCTATAAGTA	TGTGGCTCTT	CGTCAACTAG	CTTATATCAA	1620
AAAATCACGA	GCAGTTCACG	GTGATAGCAA	ACTAAAAGAT	TTTCTTAGAT	TATGTAGCTG	1680
GTACGCTCTC	CGATTTGTCA	ATCCTCGCTA	CTTTTACAAG	AAAATTGATC	AACTAGTCAA	1740
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GAAAGAAATC	TTCCCAGTTG	ATACCTTTAA	AGAACTGATT	TTAACCTGAGT	TTGAGGGCCG	1860
TATGTTGCCT	GTTCCCAAAA	AATATGACCA	ATTTTAAACC	CAGATGTATG	GCGATTATAT	1920
GACACCACCA	TCAAAAGAAA	TGCAAGAGTG	GTATAGTCAT	AGCATTAAAG	CTTATCGCAA	1980
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TAGTAGAAAA	TGAAATACAT	ATTCCCACAA	TAAAACGCAT	CATATCAAGG	TTTTTGAAAA	2100

783

ACCTTGATAT	GATGCGTTTT	ATAATTTTAA	AGACTTTTTT	CTATAGTAGA	TTGAAATAAG	2160
ATGCGAACAA	ATCAATTAGA	AAATTCAAAT	TAATTTATAG	AAATATTTTA	GTATTCCTGT	2220
GTACTGTTCT	AAATTCAGTC	TGCTATATCT	TATTTTCTA	TTTAAATCGC	TTCTGTAACA	2280
AAGCTACGAC	TTTCAAGTAC	CTTAAGCATG	GCATTAGCTG	TATCTAGCGC	TGTGAAGAGG	2340
GGCACCCCGT	GTTCAATGGC	TGAACGACGA	ATTTGCTCAC	CATCTTCGTC	AGCAGTTCGT	2400
TTTGTTCCTA	CTGTGTTAAT	GATAGCTTGA	ATTCTTCCTT	TGCGTACAAA	ACTTGGGATA	2460
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CAGTGAAGAC	CGATTGCTAA	GCGTTTGGTG	TAGTCTGCGA	TGGTCTCCTG	AACCTTTTGC	3060
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AATGGCTCAA	AGTAAAGCTT	ATCTGATACA	GAGAAGTCTG	TTGAAACGGT	CTCTGGGTTT	3660
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785

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GCACACCAA CTTTGTAATT AAAATTCAA ATTTTAACAT ATTTACTATG ATAGTTTAT	9840
TTTTTAGTGC TATACTATAG GGAAAGAGTA CATCAGATCA AGGAGGATGC TCACATGGAA	9900
GACAAGAAAC TCATTCAACT CCTATCCAAG TTAATAAAAA GCTACCAAAA CTGTAAACAG	9960
GGTACGGCAG ATGATATTCG ACTACAAGAG CTGCTAAACA CTACTATGCA AGAGCTCAA	10020
AAAACGGAAC AGTTGAACAA CAGTATCTTA ATTGATCTTG AGAAATTTTA CCAACCTACC	10080
AGTCTTCTGA TTGGACTGGG TAGCCTAAAA CTAACGATC AAGCACGCAC TGCTTGGCGA	10140
AACTATGATA AATTCATTGA CGATCATGTC AAACACGTAC TAAGTCTCTA TGGACCTGTT	10200
TTTGAATTTT AGAGCATAGA ATTTCCAGTT TTCTGTTGAC AAAATTTTCT TAAAGGTATA	10260
ATATAAAGAT ACTAATACTC GGAGGTAAGG GAGACATGAA CAACTAAGTC TATCAAATAA	10320
AGAACCTTTA TTTAGTAGAT CTGTGTTTTG TCTCTTTTGG TGTGCTCTTT TATGCTCTTT	10380
TTCTGGCATG TTAATAGAGT TTTTGTGACA TAGACTTTGG GCTCTACTAG GTAAAGTAGA	10440
GCTTTTTGTT ATGCACTATG AACATTCTAG AAAGGGAAAT CATATGATAA AAATCAATCA	10500
TCTAACCATC ACACAAAACA AAGATTTACG AGATCTTGTA TCTGACCTAA CCATGACCAT	10560
CCAAGACGGG GAAAAGGTG CTATTATTGG TGAAGAAGGA AATGGCAAAT CAACCTTACT	10620
TAAAATTTTA ATGGGGGAAG CTTTGTCTGA TTTCACATC AAGGGAAACA TCCAATCTGA	10680
CTATCAGTCA CTGGCCTACA TTCCTCAAAA AGTCCCTGAG GACCTAAAAA AGAAAACCTT	10740
ACACGACTAC TTCTTTTGTG ATTCTATTGA TTTAGACTAC AGTATCCTCT ATCGTTTGGC	10800
GGAGGAATG CATTTTGATA GCAATCGTTT CGCAAGTGAC CAAGAGATTG GCAATCTATC	10860
AGGGGGCGAA GCTTTGAAAA TTCAGCTTAT CCATGAGTTA GCCAAACCCT TTGAGATTCT	10920

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ATTTTATAGAT	GAACCTTCAA	ATGACCTAGA	CCTTGAGACA	GTGATTGGC	TAAAAGGCCA	10980
GATTCAAAAAG	ACCAGGCAAA	CCGTTATTTT	CATTTCCCAT	GATGAAGACT	TTCTTTCTGA	11040
AACGGCAGAC	ACTATTGTTC	ACTTGCAGCT	GGTCAAACAC	CGTAAAGAAG	CGGAAACGCT	11100
AGTAGAGCAT	TTAGACTATG	ATAGCTATAG	TGAGCAGAGA	AAGGCTAATT	TTGCCAAACA	11160
AAGTCAGCAA	GCTGCTAACA	ACCAAAGAGC	CTACGATAAA	ACCATGGAAA	AACATCGGAG	11220
AGTTAAGCAA	AATGTAGAAA	CTGCGCTTCG	AGCTACCAAA	GATAGTACTG	CCGGTCGCCT	11280
ATTGGCTAAA	AAGATGAAAA	CTGTCCTCTC	ACAAGAAAAA	CGCTACGAAA	AGGCAGCTCA	11340
GTCCATGACT	CAAAGCCAC	TTGAAGAGGA	ACAAATCCAA	CTTTTCTTTT	CAGACATCCA	11400
ACCATTACCA	GCTTCTAAAG	TCTTAGTCCA	ACTGGAAAAA	GAAAATTGTG	CCATTGACGA	11460
CCGAGTTTTC	GTTCAAAAAC	TACAACCTAAC	TGTCCGTGGC	CAAGAAAAAA	TCGGTATTAT	11520
CGGGCCAAAT	GGTGTGGGA	AATCAACTCT	GTTAGCCAAG	TTACAGAGAC	TTCTGAATGA	11580
TAAAAGAGAG	ATTTCACTTG	GTTTATATGCC	ACAAGATTAC	CACAAAAAAC	TGCAATTGGA	11640
TTTATCCCCA	ATAGCCTATC	TCAGTAAAC	TGGGGAAAAA	GAGGAACTAC	AGAAAATCCA	11700
ATCTCACCTA	GCTAGTCTCA	ATTTCACTTA	TCCAGAAATG	CAGCATCAAA	TTCGCTCCTT	11760
ATCTGGCGGA	CAACAGGGAA	AACTCCTGCT	TTTGGATTTA	GTCTGCGCA	AACCAAACCTT	11820
TCTCCTGCTG	GATGAACCCA	CACGAACTT	TTCTCCCACT	TCTCAACCCC	AAATCAGAAA	11880
ACTCTTTGCT	ACCTATCCAG	GCGGTCTCAT	CACTGTTTCG	CATGACCGTC	GTTTCTTAAA	11940
AGAAGTCTGC	TCGATCATCT	ATCGCATGAC	AGAACACGGT	TTGAAGCTAG	TTAATTTAGA	12000
AGATTTATAA	ATTTGCAACA	TAGCAAAAAT	CCAGAGACGA	CCTCTGGATT	CTTTTACATC	12060
TGTTTTTAAAC	GTTCAATCCG	TTCTGAGATA	GGTGGGTGGG	TATAAAAGAG	TTTTTGGAAC	12120
CCCCCACCTT	TCTTAGGATC	ATTGATATAA	AGGGCACTGC	TAGCATCATC	GACGTGGCGA	12180
CTCATAGGTT	TGCTATTGTC	CAACTTATCT	AGGGCATTAA	TCATTCCCTG	GGGATTGCGA	12240
GTCAGCTCGA	CACTAGATGC	ATCTGCCAGA	AATTCCCTCT	GACGAGAAAT	AGCGAGCTGA	12300
ACCAAGGTTG	CAGCGAGAGG	TGCCAGTACA	ATAGCTAGTA	GGGAAACCAC	TAGCATAATG	12360
ATTTCAAGAC	CATTTCCATC	TCGGTCATCA	TCACTTCGTC	TGCGACCTGC	TCCACCCAC	12420
CACATCATAC	GACCTGCCAT	ACTAGAAAGC	ATGGTGATAG	CACTAGCAAG	GGCAACTGCA	12480
ATAGTCGAAA	TACGGATATC	ATAATTACGA	ATATGACTGA	CTTCATGTCC	CATAACAGCT	12540
TCTAGTTCTT	CACGATTCAT	GATAGCTAGT	AGACCTGAAG	TCGAGCAAC	AGCCGCATTT	12600
TGAGGATTAG	AACCTGTCGC	AAAGGCATTT	AAGGCTGGAT	CATCAATGAT	GAAAACACGG	12660
GGCATAGGAA	TCTGAGCGAC	CAGAGCCATA	TCTTCCACTA	CATGGTAGAG	GTCTGGTGCC	12720

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GTTTGCTCAT	CCACCTCACG	CGCTCCATT	ATGGACATGA	CAATCTCTGT	CGATTGAAAA	12780
ATCATAGACA	AAGCGTAGAT	AAAGCCGATA	ATCAGTGCAA	TAACCAAACC	ACCAAGTCCA	12840
GATCTTATAA	AGAGATAACC	AACCGCATAA	CCAACAAGAG	CTAAGAGTAG	GAAAAATACC	12900
AGCAACAAAA	TCCAGGTTTT	TCGTTTATTG	CTTGCAATTT	GATCAAACAA	CATCTTAGTC	12960
ACCTAAACCG	CTAAATCAA	CTTTAGGAAC	CGACTTTTCC	TCTTCAGGTG	TTTGAAGGAA	13020
ATCTGCCGCT	TTAAATCCAA	ACATTCCAGC	GATAATATTG	CTCGGAAAG	TTTCTAATTT	13080
TACATTGTAG	TTGCTGACAA	CACTGTTATA	GAGTTGACGA	GAGTAAGAAA	TTTTATTTTC	13140
TGTGTTTGTC	AACTCCTCTT	GCAATTTAAC	AAAGTTAGCA	CTAGCTTTCA	AATCTGGATA	13200
GCTTCTGCA	ACTGCAAAAA	TACCTGAAAC	CTGACGAGTG	AGGGCATCAC	TGGCTTTCAT	13260
AGCTTCTGCT	GGTGAAGTCG	CTGCCGCCAC	TTGGTTACGT	AGTTCTGCCA	CCTTTTCAAG	13320
GGTAGAACCT	TCATATTTGG	CATAACCTTT	TACAGTCTCA	ATCAAGTTTG	GCAAGAGGTC	13380
ATTGCGACGT	TTCAACTGAA	CATCAATCTG	ACTCCAAGCC	TCCTTGGTTT	GCATACGATT	13440
TTTAACCAAA	CCGTATAGC	TAACAATCAC	AAAAATAACA	ATAAGAGCGA	TAACCCAAG	13500
AATAATCCAA	GTCATAATAT	AAGTCCTTTC	TGCTTTTAGA	TTAGTACCAG	TATATCAAAT	13560
TTTCTATGAT	TGTGGTAAAA	TAAGATGATA	CTAAGAAGG	AAATAACTAT	GAAACCAAAA	13620
ACATTTTACA	ACTTGCTTGC	CGAGCAGAAT	CTTCCACTTT	CGGACCAGCA	AAAAGAACAA	13680
TTTGAACGTT	ATTTTGAGCT	CTTGGTCGAG	TGGAATGAGA	AGATTAATTT	GACGGCGATT	13740
ACGGACAAGG	AAGAAGTTTA	TCTCAAACAT	TTTTACGATT	CGATTGCACC	CATTCTTCAA	13800
GGTTTGATT	CCAATGAAAC	TATCAAACCT	CTTGATATCG	GGGCTGGGGC	AGGATTTCCCT	13860
AGTCTACCAA	TGAAAATTCT	CTATCCGGAG	TTAGATGTGA	CCATTATTGA	TTCACTCAAT	13920
AAGCGCATCA	ACTTCCTACA	ACTCTTGGCT	CAAGAAGTGG	ATTTGAACGG	AGTTCATTTT	13980
TACCACGGAC	GTGCCGAAGA	TTTTGCCCAA	GACAAGAACT	TCCGTGCTCA	ATATGATTTT	14040
GTAACAGCTC	GTGCGGTTGC	CCGTATGCAG	GTCTATCTG	AATTGACTAT	TCCCTACCTT	14100
AAGGTTGGTG	GCAAACTATT	AGCACTCAAG	GCTAGCAATG	CGCCTGAGGA	ATTATTAGAA	14160
GCTAAGAATG	CCCTCAATCT	CCTTTTLAGT	AAGGTCGAAG	ACAATCTCAG	TACGCCCTAC	14220
CGAATAGAGA	TCCGCGCTAT	ATCACAGTGG	TAGAAAAGAA	AAAAGAAACA	CCAAATAAAT	14280
ATCCACGTAA	GGCTGGTATG	CCAAATAAAC	GCCCACTTTA	AATTTTLAGT	TAAACAAATG	14340
TTTACAAAAT	CAGCCTCGCT	CTTTTATTTT	TAGGCTCGGG	AAAAAATGAT	TTACAAAATC	14400
AGCCTCGCTC	TTTATTTTCT	AGGCTCGGGA	AAAAATGATT	TACAAAATCA	TTTTTTTCTG	14460

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CTATACTATC CTAAGCAAAG GTTTTTAATG TCATCCCGTG AGGTGACGAA GACGCAGAAA	14520
TATTTAAAAC TCTTTAAAAT CTAAATTTTA AAGAAGTCTT ACTCTGAGGG CCTATTGCTG	14580
TAAAATAATG GGCTCTTTTT TGATGCCCAA AAGTGAGGTT TATATGAAAC AAGAATCAAC	14640
TGTTGATTTG TTAC	14654

(2) INFORMATION FOR SEQ ID NO: 107:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 6405 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 107:

AGAAAAATCT GCTTTACAGA AAATAAAAAT AATAGGAGAA AATCTATGTC AGATTGAAA	60
AAATACGAAG GTGTCATTCC AGCCTTCTAC GCATGTTATG ATGATCAAGG AGAAGTAAGC	120
CCAGAACGTA CGCGTGCCTT GGTTC AATAC TTCATGATA AAGGTGTTCA AGGTCTTTAT	180
GTCAATGGTT CTTCTGGTGA ATGTATCTAC CAAAGCGTTG AAGATCGCAA GTTGATTTTG	240
GAAGAAGTCA TGGCGGTAGC AAAGGTAAAT TGACCATTAT TGCCCATGTT GCTTGCAATA	300
ATACTAAAGA TAGTATGGAA CTTGCTCGCC ATGCTGAAAG CTTGGGAGTA GATGCTATTG	360
CAACGATTCC ACCAATTTAT TTCCGCTTGC CAGAATACTC AGTTGCCAAA TACTGGAACG	420
ATATCAGTTC TGCAGCTCCA AACACAGACT ACGTGATTTA CAACATTCCT CAATTGGCAG	480
GGGTGCTTT GACTCCAAGC CTTTACACAG AAATGTTGAA AAATCCTCGT GTTATCGGTG	540
TGAAGAACTC TTCTATGCCA GTTCAAGATA TCCAAACCTT TGTCAGCCTT GGTGGAGAAG	600
ACCATATCGT CTTTAATGGT CCTGATGAGC AGTTCCTAGG AGGACGCCTC ATGGGGGCTA	660
GGGTGGTAT CGGTGGTACT TATGGTGCTA TGCCAGAACT CTTCTTGAAA CTCAATCAGT	720
TGATTGCGGA TAAGGACCTA GAAACAGCGC GTGAATTGCA GTATGCTATC AACGCAATCA	780
TTGGTAAACT CACTTCTGCT CATGGAAATA TGTACGGTGT CATCAAAGAA GTCTTGAAAA	840
TCAATGAAGG CTTGAATATT GGATCTGTTC GTTCACCATT GACACCAGTG ACTGAAGAAG	900
ATCGTCCAGT TGTAGAAGCG GCTGCTGCCT TGATTCTGTA AACCAAGGAG CGCTTCCTCT	960
AATCTAAAAG GAGGTATTTA TGACATATTA CGTTGCAATT GATATCGGTG GAACCAACAT	1020
CAAGTATGGT TTGGTTGATC AAGAGGGGCA ACTTCTTGAA TCGCATGAAA TGCCAACTGA	1080
GGCGCATAAG GGTGGACCTC ATATCTTACA AAAGACCAAA GATATCGTAG CTAGTTATTT	1140
AGAAAAAGGC CCAGTAGCAG GTGTTGCCAT ATCTTCTGCT GGGATGGTGG ATCCGATAA	1200

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GGGTGAGATT TTCTATGCTG GGCCGCAAAT CCCTAACTAC GCAGGCACCC AGTTCAAAAA	1260
GGAAATCGAA GAAAGCTTTA CTATTCCTTG TGAGATTGAA AATGATGTCA ACTGTGCAGG	1320
TCTTGCTGAG GCAGTATCTG GTTCAGGCAA GGGAGCAAGT GTGACACTTT GCTTGACCAT	1380
TGGAACCGGT ATCGGTGGTT GCTTGATTAT GGATAGGAAA GTCTTCCATG GTTTTAGCAA	1440
TTCAGCCTGT GAAGTCGGGT ATATGCATAT GCAGGATGGA GCTTTTCAAG ACTTGGCTTC	1500
TACAACAGCT TTAGTGAAAT ATGTAGCTGA AGCCCATGGA GAAGATGTTG ATCAGTGGA	1560
TGGCCGTAGA ATTTTCAAAG AAGCCACTGA AGGAAACAAA ATCTGCATGG AAGGTATTGA	1620
CCGTATGGTT GACTATCTAG GAAAAGGTCT GGCAAATATT TGCTACGTTG CCAATCCAGA	1680
AGTGGTTATT CTTGGTGGTG GTATCATGGG GCAAGAGGCT ATCCTCAAAC CTAAGATCCG	1740
TACAGCCTTG AAAGAGGCTT TGGTACCAAG TTTAGCAGAA AAAACACGAT TAGAATTTGC	1800
CCATCACCAA AATACAGCAG GGATGTTGGG TGCATATTAT CATTTTAAGA CAAAACAATC	1860
CTAGTTTGGC TCAGCCAAAC TAGGATTTTC TTACACGTTT TTGTCTACGA TAGCCGTTGA	1920
GTTTTTTATT TTCCAGTAG CTATTAAAGA TTTTTCCTT GCTTTCGCGA TTGATTTCCA	1980
AAAAGTAGGC ATAAATCAAA TCGATAAAGA AGAGCATAGG AAGTTGAGCG GATATTCGTT	2040
GGATATAGGA GGGTTGGCTG TGGGTGGCTA CAAGAACAGT CTCTGTATAG GTCTGGCTAT	2100
CTTTATTGGG AACACTTGTA AAGAGTACAG TCTTTGCCCC CATCTCCTTA GCATCTAATA	2160
GAATATCTAA AATAGAAGGA GTTGAGCCTG AAAGTGAGAA GCCCAGTACT AGACAATTTT	2220
CATCCATGAT GCTGGTTGTC CAGGCAAAGC CGTCTTGGTC TGTCAAAGCT TCGCAGACCA	2280
CACCTAGTCG CATAAAACGT AATTTCATTT CACGGGCGAC GAGGCCAGAA CTCCCTGTTT	2340
CAAAGAAGTA GATACGCTCA GCATCTTCGA TTAGCTGGGC AATTCGTTCT AGTTGGATTT	2400
CGTCAATCAA GTCTTGTTT TGTTCCTCA TATTGCTATA ACTTCTGAGG ACTCGTTTGG	2460
TCAGTGGACT GTGCTTGGAG ACTTGGTTGG CTTGATTTTC TGCCTGATGT TGGTATTGGA	2520
AAATAAATTC TCGGTAGCCA GTAAAGCCAC ACTTTTTAGC AAAGCGGGTC AAAGCAGCTT	2580
GAGAAATATG TAATTTTTGG GTGACTTGTT GAGAAGATAA ATCATCTGTA ATCGTTTCAG	2640
CTTGCAAAAA ATAGCGAGCG ATTTCTTGTT CTAGGTCTGT CATTTCTTCA AAATGTGAAT	2700
CAATGATAGT TGCATATCT GGTTTGTCCA TAGGGAAAGC TCCTTTACAT GAGTCATACT	2760
GGAAGACTAG ATCAGAGAAT AGTCACACTT CATTATAACA CATAATATAA GGATAGATAA	2820
ATAAAAACGC ATCTCTGTTT TAAAAACGAA AAAATCGAAA AAGCTTCTCT CTTTTCCATA	2880
ATTTTCTACT CAAATTGTGG TACAATTAAG AGTAAGATTT TAAGTTAGAA ATGAGACTGA	2940

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TTTGTATGAG	AAAATTTAAC	AGCCATTTCGA	TTCCGATTTCG	GCTTAATTTA	TTGTTTTTCAA	3000
TCGTCAATTTT	ACTCTTTATG	ACCATTTATG	GTCGTTTGTT	GTATATGCAG	GTTTTGAACA	3060
AGGATTTTTA	CGAAAAAAG	CTAGCTTCAG	CTAGTCAGAC	CAAGATTACA	AGCAGTTCAG	3120
CCCGTGGGGA	AATTTATGAT	GCTAGTGGA	AACCTTTGGT	AGAAAATACG	TTAAAGCAGG	3180
TTGTTTCCTT	TACGCGTAGC	AATAAAATGA	CGGCTACAGA	CTTAAAAGAA	ACAGCTAAAA	3240
AGTTACTGAC	TTATGTGAGC	ATCAGTTCTC	CAAATTTGAC	AGAACGCCAG	CTGGCGGATT	3300
ACTATTTGGC	TGATCCTGAA	ATCTATAAAA	AAATAGTGGA	AGCTCTCCCA	AGTGAGAAAC	3360
GCTTGGATTC	AGATGGCAAT	CGTCTATCCG	AATCAGAACT	GTATAACAAT	GCGGTCGATA	3420
GTGTACAAAC	GAGTCAACTA	AACTATACAG	AGGATGAAAA	GAAAGAAATC	TATCTTTTTA	3480
GTCAGTTAAA	TGCTGTTGGA	AACTTTGCGA	CAGGAACCAT	TGCGACAGAT	CCTCTAAATG	3540
ATTCTCAGGT	GGCTGTTATT	GCCTCTATTT	CAAAGGAGAT	GCCTGGCATT	AGTATTTCTA	3600
CTTCTTGGA	TAGAAAGGTT	TTGGAACTT	CCCTTTCTTC	TATAGTTGGG	AGTGTATCCA	3660
GTGAAAAAGC	TGGTCTCCCA	GCGGAAGAAG	CAGAAGCCTA	TCTTAAAAAA	GGCTATTTCTC	3720
TAAATGACCG	TGTAGGAACC	TCCTATTTGG	AAAAGCAATA	TGAAGAGACC	TTACAAGGAA	3780
AACGCTCGGT	AAAAGAAATC	CATCTGGATA	AATATGGCAA	TATGGAAAGC	GTGGATACAA	3840
TTGAGGAAGG	TAGTAAGGGA	AACAATATCA	AACTGACCAT	TGATTTGGCT	TTCCAAGATA	3900
GCGTGGATGC	TTTACTGAAA	AGTTATTTCA	ATTCTGAGCT	AGAAAATGGT	GGAGCCAAGT	3960
ATTCTGAAGG	TGTCTATGCA	GTCGCCCTTA	ACCCAAAAAC	AGGTGCGGTT	TTGTCTATGT	4020
CAGGGATTAA	ACATGACTTG	AAAACGGGAG	AGTTGACGCC	TGATTCCCTTG	GGAACGGTAA	4080
CCAATGTCTT	TGTTCCAGGT	TCGGTTGTCA	AGGCGGCGAC	CATCAGCTCA	GGTTGGGAAA	4140
ATGGAGTCTT	GTCAGGAAAC	CAGACCTTGA	CAGACCAGTC	CATTGTCTTC	CAAGGTTTCA	4200
CTCCCATCAA	TTCTTGGTAT	ACTCAGGCTT	ACGGTTCATT	CCCTATCACA	GCGGTCCAAG	4260
CTCTGGAGTA	TTCATCAAAAT	ACCTATATGG	TCCAAACAGC	CTTAGGTCTT	ATGGGGCAAA	4320
CCTATCAACC	CAATATGTTT	GTCGGCACCA	GCAATCTAGA	GTCTGCTATG	GAGAACTGTC	4380
GTTCAACCTT	TGGCGAATAT	GGCTTGGGTA	CTGCGACAGG	AATTGACCTA	CCAGATGAAT	4440
CTACTGGATT	TGTTCCCAAA	GAGTATAGCT	TTGCTAATTA	CATTACTAAT	GCCTTTGGGC	4500
AGTTTGATAA	CTATACGCCG	ATGCAGTTGG	CTCAGTATGT	AGCAACTATT	GCAAATAATG	4560
GTGTTTCGTGT	GGCTCCTCGT	ATTGTTGAAG	GCATTTATGG	TAATAATGAT	AAGGGAGGAC	4620
TGGGTGACTT	GATTCAGCAA	CTGCAACCGA	CAGAGATGAA	TAAGGTCAAT	ATATCCGACT	4680
CCGATATGAG	CATCTTGCAC	CAAGGTTTTT	ATCAGGTTGC	CCATGGTACT	AGTGGATTGA	4740



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CAACTGGACG	TGCCTTTTCA	AATGGTGCCT	TGGTATCCAT	TAGCGGAAAA	ACAGGTACAG	4800
CCGAAAGCTA	TGTGGCAGAT	GGTCAGCAAG	CAACCAATAC	CAATGCGGTG	GCCTATGCCC	4860
CATCTGATAA	TCCCCAAATC	GCTGTGCGAG	TGGTCTTTCC	TCATAATACC	AATCTAACAA	4920
ATGGTGTAGG	ACCTTCCATT	GCGCGTGACA	TTATCAATCT	GTATCAAAAA	TACCATCCAA	4980
TGAATTAGAA	AGGAAATTAT	GCTTTATCCA	ACACCTATTG	CCAAGTTGAT	TGACAGTTAT	5040
TCTAAGTTAC	CAGGTATCGG	GATTAAGACG	GCTACGCGTC	TGGCCTTTTA	TACGATTGGG	5100
ATGTCTGCTG	ATGATGTCAA	TGAATTTGCA	AAAAATCTCC	TTTCTGCTAA	GAGAGAAATTG	5160
ACATATTGTT	CTATTGTGG	ACGTTTGACA	GACGACGATC	CTTGTTCTAT	CTGTACTGAT	5220
CCGACTCGTG	ACCAGACAAC	AATTTTAGTT	CTTGAGGATA	GTAGAGATGT	GGCAGCCATG	5280
GAAAATATCC	AAGAATACCA	TGGACTCTAT	CATGTCCTTC	ATGGCCTCAT	TTCTCCTATG	5340
AATGGTATCA	GTCCGGACGA	TATCAATCTC	AAGAGCCTTA	TGACTCGTCT	TATGGATAGT	5400
GAGGTTTCAG	AAGTGATTGT	GGCGACTAAT	GCTACAGCGG	ATGGTGAAAG	GACTTCCATG	5460
TATCTTTCAC	GTTTGCTCAA	CGCGGCTGGT	ATCAAGGTTA	CGCGTCTAGC	ACGAGGTCTC	5520
GCTGTGGGAG	CGGACATTGA	GTATGCGGAC	GAAGTGACAC	TCTTACGAGC	CATTGAAAAT	5580
CGGACAGAGT	TGTAAGTGTA	GGCAAATTTA	CGAACTCCAT	TCATTTATAA	AAAATCAAAG	5640
AGGCTGAAAA	TCGTTCTCTAT	CGGCCTCTTT	TTGTATAGTG	TGATGAGTAG	GCTCAGGTTT	5700
AAGTTTTAAA	AAACCAAGCA	AATATGATAT	ACTAAAGAGC	GAGTATTCTA	GTAGAATTAG	5760
GACAAATAAT	ATGAAACAAA	CGATTATTCT	TTTATATGGT	GGACGGAGTG	CGGAACGCGA	5820
AGTCTCTGTC	CTTTCAGCTG	AGAGTGTCAT	GCGTGCGGTC	GATTACGACC	GTTTCACAGT	5880
CAAGACTTTC	TTTATCAGTC	AGTCAGGTGA	CTTTATCAAA	ACACAGGAAT	TTAGTCATGC	5940
TCCGGGGCAA	GAAGACCGTC	TCATGACCAA	TGAAACCATT	GATTGGGATA	AGAAAGTTGC	6000
ACCAAGTGCT	ATCTACGAAG	AAGGTGCAGT	GGTCTTTCCA	GTCCTTCACG	GGCCAATGGG	6060
AGAAGATGGC	TCTGTCAAG	GATTCTTGGA	AGTTTGTAAA	ATGCCTTACG	TTGGTTGCAA	6120
CATTTTGTCA	TCAAGTCTTG	CCATGGATAA	AATCACCAGT	AAGCGTGTTT	TGGAATCTGC	6180
TGGTATTGCC	CAAGTTCCTT	ATGTGGCTAT	CGTTGAAGGC	GATGATGTGA	CTGCTAAAAAT	6240
CGCTGAAGTG	GAAGAAAAAT	TGGCTTATCC	AGTCTTCACT	AAGCCGTCAA	ACATGGGGTC	6300
TAGTGTGCGT	ATTTCTAAGT	CTGAAAACCA	AGAAGAACTC	CGTCAAGCCT	TAAAACCTGC	6360
CTTCCGATAT	GACAGCCGTG	TCTTGTTTGA	GCAAGGAGTG	AATGC		6405

(2) INFORMATION FOR SEQ ID NO: 108:

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- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 11309 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 108:

CGAGCTCGGG TACCGGGATT TTAAGGAGTT TGATATGTAT AACCTATTAT TAACCATTTT	60
ATTAGTATTA TCTGTTGTGA TTGTGATTGC AATTTTCATG CAACCAACCA AAAACCAATC	120
CAGCAATGTA TTTGATGCCA GTTCAGGTGA TTTGTTTGAA CGCAGTAAAG CTCGCGGTTT	180
TGAAGCTGTA ATGCAGCGTT TGACAGGGAT TTTAGTCTTT TTCTGGCTAG CCATTGCCTT	240
AGCATTGACG GTATTATCAA GTAGATAAGA AAATAATGGG CAGGACTAGG TCTTTGCCTC	300
TTTTTATTTT TAAAGGATGT TTGAGAAGGT TTTACAGTAA AAGAAAATTA AAAAATCTAG	360
AAAGAAAATA TGAAAGATAG AATAAAAGAA TATTTACAAG ACAAGGGAAA GGTGACTGTT	420
AATGATTTGG CTCAGGCTTT GGGAAAAGAC AGTTCCAAGG ATTTTCGTGA GTTGATTAAA	480
ACCTTGTCCT TAATGGAAAG AAAGCACCAA ATTCGTTTGG AAGAAGATGG TAGTCTGACA	540
TTAGAAATTA AGAAAAACA TGAGATTACC CTCAAGGGGA TTTTTCATGC CCATAAAAAAT	600
GGCTTTGGCT TTGTTAGTCT GGAAGGCGAG GAGGACGACC TTTTGTAGG GAAAAATGAT	660
GTCAACTATG CTATTGATGG TGATACCGTC GAGGTAGTGA TTAAGAAAGT CGCTGACCGC	720
AATAAGGGAA CAGCAGCAGA AGCCAAAATT ATTGATATCC TAGAACACAG TTTGACAACA	780
GTGTCGGGC AAATCGTTCT GGATCAGGAA AAACCTAAGT ATGCTGGCTA TATTCGTTCA	840
AAAAATCAGA AAATCAGTCA ACCGATTTAT GTTAAGAAAC CAGCCCTAAA ATTAGAAGGA	900
ACAGAAGTTC TCAAAGTCTT TATCGATAAA TACCCAAGCA AGAAACATGA TTTCTTTGTC	960
GCGAGTGTTT TCGATGTAGT GGGACACTCA ACGGATGTCG GAATTGATGT TCTTGAGGTC	1020
TTGGAATCAA TGGACATTGT ATCCGAGTTT CCAGAAGCTG TTGTTAAGGA AGCAGAAAGT	1080
GTGCCTGATG CTCCGTCTCA AAAGGATATG GAAGGTCGTC TGGATCTAAG AGATGAAATT	1140
ACCTTTACCA TTGACGGTGC GGATGCCAAG GACTTGGACG ATGCAGTGCA TATCAAGGCT	1200
CTGAAAAATG GCAATCTGGA GTTTGGGGTT CACATCGCAG ATGTTTCTTA TTATGTGACC	1260
GAGGGGTCTG CCCTTGACAA GGAAGCCCTT AACCGTGCGA CTTCTGTTTA CGTGACAGAC	1320
CGAGTGGTGC CAATGCTTCC AGAACGACTA TCAAATGGCA TCTGCTCTCT CAATCCCCAA	1380
GTTGACCGCC TGACCCAGTC TGCTATTATG GAGATTGATA AACATGGTCG TGTGGTCAAC	1440
TATACCATTA CACAAACAGT TATCAAGACC AGTTTTCGTA TGACCTATAG CGATGTCAAT	1500

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GATATCCTAG CTGGCGATGA AGAAAAGAGA AAAGAATATC ATAAAATTGT ATCAAGTATC	1560
GAAGTCATGG CCAAGCTTCA TGAACTTTA GAAACATGC GTGTGAAACG TGGAGCTCTC	1620
AATTTTGATA CCAATGAAGC GAAGATTTTA GTGGATAAAC AAGGTAAGCC TGTTGATATC	1680
GTTCTTCGGC AGCGTGGTAT TGCCGAGCGG ATGATTGAGT CTTTATGTT GATGGCTAAT	1740
GAAACAGTTG CCGAACATTT CAGCAAGTTG GATTTGCCTT TTATCTATCG AATTCACGAG	1800
GAGCCTAAGG CTGAAAAGGT TCAGAAGTTT ATTGATTATG CTTGAGTTT TGGCTTGCGC	1860
ATTTATGGAA CTGCCAGTGA GATTAGTCAG GAGGCAC TTC AAGACATCAT GCGTGCTGTT	1920
GAGGGAGAAC CTTATGCAGA TGTATTGTCC ATGATGCTTC TTCGCTCTAT GCAGCAGGCT	1980
CGTTATTCGG AGCACAATCA CGGCCACTAT GGAAGTAGCTG CTGACTATTA TACTCACTTT	2040
ACCAGTCCAA TTCGTCGTTA TCCAGACCTT CTTGTTTACC GTATGATTCG GGATTACGGC	2100
CGTTCTAAGG AAATAGCAGA GCATTTTGAA CAAGTGATTC CAGAGATTGC GACCCAGTCT	2160
TCCAACCGTG AACGTCGTGC CATAGAAGCT GAGCGTGAAG TCGAAGCCAT GAAAAGGCT	2220
GAGTATATGG AAGAATACGT GGGTGAAGAG TATGATGCAG TTGTATCAAG TATTGTCAAA	2280
TTGCGTCTCT TTGTCGAATT GCCAAACACA GTTGAAGGCT TGATTACAT CACTAATCTG	2340
CCTGAATTTT ATCATTTCAA TGAGCGTGAT TTGACTCTTC GTGGAGAAAA ATCAGGTATC	2400
ACTTTCGAG TGGGTGAGCA GATCCGTATC CGTGTGAAA GAGCGGATAA AATGACTGGA	2460
GAGATTGATT TTTCATTCGT ACCTAGTGAG TTTGATGTGA TTGAAAAGG CTTGAAACAG	2520
TCTAGTCGTA GTGGCAGAGG GCGTGATTCA AATCGTCGTT CGGATAAGAA GGAAGACAAG	2580
AGAAAATCAG GACGCTCAA TGATAAGCGT AAGCATTCAC AAAAAGACAA GAAGAAAAA	2640
GGAAAGAAAC CTTTTACAA GGAAGTAGCT AAGAAAGGAG CCAAGCATGG CAAAGGGCGA	2700
GGGAAAGGTC GTCGCACAAA ATAAAAAGGC ACGCCACGAC TATACAATCG TAGATACGCT	2760
AGAGGCAGGG ATGGTCTTGA CTGGAAGTGA AATCAAGAGT GTACGAGCTG CTCGAATTAA	2820
TCTCAAGGAT GGCTTTGCTC AAGTGAAAAA TGGAGAAGTT TGGCTGAGCA ATGTTTCATAT	2880
CGCGCCTTAC GAAGAGGGCA ATATCTGGAA CCAGGAACCA GAACGTCGTC GTAACTCCT	2940
GCTCCATAAA AAGCAAATTC AAAAATTGGA ACAAGAGATC AAAGGGACAG GAATGACCTT	3000
AGTTCCCTT AAGGTCTATA TAAAGATGG CTACGCTAAG CTTCTTTTAG GACTTGCCAA	3060
AGGGAAGCAT GACTATGACA AACGGGAGTC TATCAAACGT CGTGAGCAAA ATCGAGATAT	3120
CGCGCGTGTG ATGAAAGCTG TTAATCAGCG ATAAAAAGAG GAATTGAAAA TGGAAAAATT	3180
AGTTGCCTAT AAACGCATGC CTTGTGGAA TAAACAAACA ATGCCTGAAG CTGTTGAGCA	3240

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AAAGCACAAT	ACAAAAGTTG	GGACTTGGGG	GAAAATTACT	GTCTTGAAGG	GAGCTCTCAA	3300
GTTTATTGAA	TTGACAGAAG	AAGGGGAAGT	TCTAGCTGAA	CACCTCTTTG	AAGCAGGGGC	3360
AGACAATCCA	ATGGCCCAAC	CTCAAGCCTG	GCACCGAGTG	GAAGCTGCCA	CAGATGATGT	3420
GGAATGGTAC	TTGGAATTTT	ATTGTAAACC	TGAGGATTAT	TTTGCTAAAA	AATACAATAC	3480
CAATCCTGTT	CATTCAGAGG	TCCTAGAGGC	CATGCAGACA	GTGAAACAAG	GGAAAGCTTT	3540
GGATTTGGGT	TGTGGTCAGG	GGCGTAATTC	TCTTTTCTA	GCCCAGCAAG	ATTTTGATGT	3600
GACGGCTGTA	GATCAAAATG	GA CTAGCTCT	TGAAATCTTG	CAAAGCATTG	TGGAGCAGGA	3660
AGATTTGGAC	ATGCCTGTTG	GCCTTTACGA	TATCAATTCA	GCTAGCATTG	AACAAGAATA	3720
TGATTTTATC	GTTTCAACAG	TTGTCTCAT	GTTTCTACAA	GCGGACCGCA	TTCCAGCTAT	3780
TATTCAAAAT	ATGCAGGAGA	AAACCAGTGT	TGGTGGTTAC	AACCTTATCG	TTTGTGCCAT	3840
GGACACGGAG	GATTATCCTT	GCTCGGTTAA	CTTCCCATTG	ACCTTTAAAG	AAGGAGAACT	3900
GGCAGACTAT	TACAAGGATT	GGGAATTGGT	TAAGTACAAT	GAAAATCCAG	GCCATTTGCA	3960
CCGTCGCGAT	GAGAATGGCA	ATCGTATTCA	ACTACGCTTT	GCGACCTTAC	TAGCTAAGAA	4020
AATCAAGTAA	ACACACATGA	AGATTAGGAA	TTTTCCTGAT	CTTTTCTCTT	TTTACGAAT	4080
GATATAGAAA	AGGAGGGAAT	TCATGTTTGT	TGCGAGAGAT	GCTAGGGGAG	AATTGGTAAA	4140
TGTGTTAGAG	GATAAACTTG	AGAAGCAAGC	ATACACCTGC	CCAGCTTGTG	GAGGCCAGCT	4200
CCATTTGCGT	CAAGGACCAA	GTGTACGGAC	GCATTTTGCC	CATAAATCCT	TAAAAGACTG	4260
TGATTTTTC	TTTGAAAATG	AAAGTCCAGA	ACACCTGGCC	AATAAGGAAT	CCCTCTATCA	4320
CTGGTTGAAA	AAAGAGACAA	AGGTTCAATT	AGAGTACCCG	CTTTCAGAAC	TTAAACAGAT	4380
TGCGGATGTA	TTTGTAATG	GCAATCTAGC	TCTAGAAGTT	CAGTG TAGTC	CCTTG CCTCA	4440
GAAAGTCCTT	AAAGAGCGAA	GTGAGGGCTA	TCGTAGTCAG	GGTTACCAAG	TACTGTGGTT	4500
GCTGGGTCAA	AAACTGTGGC	TCAAGGAGCG	TTTGACTCGT	CTACAGCAAG	GTTTTCTTTA	4560
TTTCAGTCAA	AACATGGGCT	TTTATGTTTG	GGAATTAGAC	AAGGAAAAAC	AAGTTTAAAG	4620
ACTCAAATAC	CTGATTTACC	AGGATCTCCG	CGGTAAACTC	CATTATCAAA	TCAAGGAATT	4680
TTCTATGGT	CAAGGTAGTT	TATTGGAAAT	ATTGCGTCTT	CCCTATAAGA	GACAAAAAAT	4740
ATCTCATTTT	ACAGTTTCTG	AGGACAAGGA	CATCTGTGCG	TATATCCGGC	AACAACTTTA	4800
TTATCAAAAT	CTCTTTTGGG	TGAAAGAACA	AGCAGAAGCC	TATCAAAAGG	GAGAAAATAT	4860
CCTGACTTAT	GGACTGAAAG	AATGGTATCC	ACAAATTCGA	CCAATAGTGG	GCAAATTTTT	4920
CCAGATTGAA	CAAGACTTGA	CTAGCTATTA	TCAGCACTTT	TATACCTATT	ACCAAAAAAA	4980
TCCTCAAAAT	GATTGGCAAA	AGCTTTATCC	ACCAGCCTTT	TATCAGCAAT	ATTTCTTGAA	5040

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AAATATGGTA GAATAGAAAG GATGGAGGAA TCTAATGGTA TTACAAAGAA ATGAAATAAA	5100
TGAAAAAGAT ACATGGGATC TATCAACGAT CTACCCAACT GACCAGGCTT GGAAGAAGC	5160
CTTAAAGAT TTAACAGAAC AATTGGAGAC AGTAGCCCAG TATGAAGGCC ATCTCTTGGA	5220
TAGTGCGGAT AACCTACTAG AAATCACTGA ATTTCTCTT GAAATGGAAC GCCAGATAGA	5280
GAAGCTTTAC GCTTATGCTC ATATGAAGAA TGACCAGGAT ACACGTGAAG CTAAGTATCA	5340
AGAGTACTAT GCCAAGGCCA TGACACTCTA CAGCCAGTTA GACCAAGCCT TTTCATTCTA	5400
TGAGCCTGAA TTATGGAGA TTAGCGAAAA GCAGTATGCT GACTTTTTAG AAGCTCAACC	5460
AAAGCTGCAG GTTATCAAC ACTATTTTGA CAAGCTTTTG CAAGGCAAGG ATCACGTTCT	5520
TTCAACAACGT GAAGAAGAAT TATTGGCTGG AGCTGGAGAA ATCTTTGGTT CAGCAAGTGA	5580
AACCTTCGCT ATCTTGACA ATGCGGATAT TGTGTTCCCT TATGTCCTAG ACGATGATGG	5640
TAAAGAAGTT CAGCTATCTC ATGGGACTTA CACACGTTTG ATGGAGTCTA AAAACGTGA	5700
GGTTCGCCGT GGTGCCTATC AAGCTCTTTA TCGGACTTAC GAACAATTCC AACACACCTA	5760
TGCCAAAACC TTGCAAACCA ATGTTAAGGT GCAAAATTAC CGTGCTAAAG TTCGTAACCTA	5820
CAAGAGTGCT CGTCATGCAG CCCTCGCAGC GAATTTTGTT CCAGAAAGTG TTTATGACAA	5880
TTTGGTAGCA GCAGTTCGCA AGCATTTGCC ACTCTTACAT CGTATCTTG AGCTTCGTTC	5940
AAAAATCTTG GGGATTTTCA ATCTCAAGAT GTACGATGTC TACACACCGC TTTCATCTGT	6000
TGAATACAGT TTTACCTACC AAGAAGCCTT GAAAAAGCA GAAGATGCTT TGGCAGTCTT	6060
GGGTGAGGAT TACTTGAGCC GTGTTAAACG TGCCTTCAGC GAGCGTTGGA TTGATGTTTA	6120
CGAAAATCAA GGCAAGCGTT CAGGTGCCTA CTCTGGTGGT TCTTATGATA CCAATGCCTT	6180
TATGCTTCTC AACTGGCAAG ACAATCTGGA CAATCTCTT ACTCTTGTTT ATGAAACAGG	6240
TCACAGTATG CATTCAGCT ATACTCGTGA AACTCAGCCT TATGTTTACG GGGATTACTC	6300
TATCTTTTGG GCTGAGATTG CCTCAACTAC CAATGAAAAT ATCTTGACGG AGAAATTATT	6360
GGAAGAAGTG GAAGACGACG CAACACGCTT TGCTATTCTC AATAACTTCC TAGATGGTTT	6420
CCGTGGAACA GTTTTCCGCC AAATCAATT TGCTGAGTTT GAACACGCCA TTCACCAAGC	6480
AGATCAAAAT GGGGAGGTCT TGACAAGCGA TTTCCTAAAT AAATCTTACG CAGACTTGAA	6540
CCAAGAGTAT TATGGTTTGA GTAAGGAAGA CAATCCTGAA ATCCAATACG AGTGGGCTCG	6600
CATTCCACAC TTCTACTATA ACTACTATGT ATATCAATAT TCAACTGGCT TTGCGGCCGC	6660
CTCAGCCTTG GCTGAAAAA TTGTCCATGG TAGTCAAGAA GACCGTGACC GCTATATCGA	6720
CTACCTCAAG GCAGGTAAGT CGGACTATCC ACTTAATGTC ATGAGAAAAG CTGGTGTGTA	6780

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TATGGAGAAG GAAGACTACC TCAACGATGC CTTTGCAGTC TTTGAACGCC GTTTAAATGA	6840
GTTTGAAGCC CTTGTTGAAA AATTAGGATT GGCATAAAAT GGTGAATCG TATAGTAAGA	6900
ATGCTAACCA TAACATGCGT CGTCCTGTCG TCAAAGAAGA AATTGTAGAC TTGATGCGTC	6960
AGCGTCAAAA GCAGGTCACA GGTTCCTTGA AAGAATTGGA AGACTTTGCC CGCAAGGAAA	7020
ATATTCCTAT TATTCCTCAT GAAACGGTTG CTTATTTCCG TTTTCTTATG GAAACCATGC	7080
AGCCTAAAAA TATTCTGGAA ATTGGGACGG CTATCGGTTT TTCAGCTCTC TTGATGGCTG	7140
AACATGCGCC AAATGCTAAG ATTACAATA TTGATCGTAA TCCAGAAATG ATTGGTTTGT	7200
CCAAGGAAAA TTTTGCCAG TTTGACAGTC GCAAGCAAAT CACTCTCCTA GAGGGAGATG	7260
CGGTGGATGT CTTATCTACA CTGACAGAGT CTTATGATTT CGTCTTTATG GATTCTGCCA	7320
AGTCTAAATA CATCGTCTTT CTGCCAGAAA TCCTCAAACA TTTGGAAGTT GGTGGTGTGG	7380
TTGTCTTGGA TGATATTTT CAAGGTGGTG ATGTTGCCAA GGATATTATG GAAGTCCGTC	7440
GTGGTCAGCG AACCATTTAT CGAGGCCTTC AAAAATTATT TGATGCAACC TTAGACAATC	7500
CAGAACTCAC CGCAACATTA GTGCCTTTAG GAGATGGTAT TCTCATGCTT CGTAAAAATG	7560
TAGCAGATGT TCAACTGTCT GAAAGCGAAT GATTTTCAGA AAAATTTAAG AAAAAATAGT	7620
AAAAATAGATA GAGTAACACT TATCTCAAAG GAGTAGACAT GAAGAAAAAA TTATTGGCAG	7680
GTGCCATCAC ACTATTATCA GTAGCAACTT TAGCAGCTTG TTCGAAAGGG TCAGAAGGTG	7740
CAGACCTTAT CAGCATGAAA GGGGATGTCA TTACAGAACA TCAATTTTAT GAGCAAGTGA	7800
AAAGCAACCC TTCAGCCCAA CAAGTCTTGT TAAATATGAC CATCCAAAAA GTTTTGTGAA	7860
AACAATATGG CTCAGAGCTT GATGATAAAG AGGTTGATGA TACTATTGCC GAAGAAAAAA	7920
AACAATATGG CGAAAACTAC CAACGTGTCT TGTACAAGC AGGTATGACT CTTGAAACAC	7980
GTAAAGCTCA AATTCGTACA AGTAAATTAG TTGAGTTGGC AGTTAAGAAG GTAGCAGAAG	8040
CTGAATTGAC AGATGAAGCC TATAAGAAAG CCTTTGATGA GTACACTCCA GATGTAACGG	8100
CTCAAATCAT CCGTCTTAAT AATGAAGATA AGGCCAAAGA AGTTCTCGAA AAAGCCAAGG	8160
CAGAAGGTGC TGATTTTGCT CAATTAGCCA AAGATAATTC AACTGATGAA AAAACAAAAG	8220
AAAATGGTGG AGAAATTACC TTTGATTCTG CTTCAACAGA AGTACCTGAG CAAGTCAAAA	8280
AAGCCGCTTT CGCTTTAGAT GTGGATGGTG TTTCTGATGT GATTACAGCA ACTGGCACAC	8340
AAGCCTACAG TAGCCAATAT TACATTGTAA AACTCACTAA GAAAACAGAA AAATCATCTA	8400
ATATTGATGA CTACAAAGAA AAATTAAAAA CTGTTATCTT GACTCAAAAA CAAAATGATT	8460
CAACATTTGT TCAAAGCATT ATCGGAAAAG AATTGCAAGC AGCCAATATC AAGGTTAAGG	8520
ACCAAGCCTT CCAAAATATC TTTACCCAAT ATATCGGTGG TGGAGATTCA AGCTCAAGCA	8580

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GTAGTACATC	AAACGAATAG	TCCAAATCAA	TGAGTCAGGG	AAAAAACTCG	ACTTCAGGAA	8640
AAAATGAAGC	AAACATTCCC	ACAATAAAAC	GCATAGTACA	AGGTTTGTAC	TGCCCCCCAA	8700
AAAGTTAGAC	AATTAATTTA	TCCGAAGGAT	TTAGTTCTGT	ATTGCACAGA	GCTAAGTCCT	8760
TTTAGTTTTA	TCTTAATTCT	CTTATTGTTG	TAATAATCAA	TATAGTCTAT	AATGGCTCGT	8820
TCCAATTGAT	TAAGTGATTT	AAATGTTTTC	TCATAGCCAT	AAAACATTTT	GGATTTTAAA	8880
ATGCCAAAGA	AAGATTCCAT	CCTACCGTTG	TCTTGGCTGT	TGCCCTTACG	TGACATGGAT	8940
GCTTGAATTC	CCTTACTCTC	TAGGAAGCGA	TGATAAGAAT	CGTGTTGATA	TTGCCAGCCT	9000
TGGTCACTAT	GGAGAATCGT	ATTCTCGTAG	TGCTTCTCTT	TGAATGCCTG	TTCCAACATT	9060
AACGATCAAT	CAATTTAATC	ATGTACCTAA	GATTAGAATT	GTTTATCCCA	AATTTATTTG	9120
AAAGCTTCTC	TAAGCTATAT	CCTTGTTTTT	TAAGTTCATA	GATCTGAAC	TTATCATCAT	9180
AAGTTAATTT	CATAATAAAA	ACACCCCAAA	AGTTAGATTT	TTTCTGTCTA	ACTTTTGGGG	9240
TGTAGTTCAT	GTACACCTGA	TATGATGCGT	TTTATAATTT	TAAAGACTTT	TTGACCAGCC	9300
TCATTTTTTT	AACTTGATAC	TCAGTGAAAA	GCAAAGATTA	AACTAGGAAG	CTAGCTGTAG	9360
GCTGCTCAA	GAACAGCTTT	GAGGTTGTAG	ATAAACTTG	TGAGGTCACC	AACATATATA	9420
ATGTGAAGCT	GACGTGGTTT	GAATAGATTT	TAGAAGAGTA	TGAGTCTGGA	AGTTTTAATG	9480
GATAATGCAA	GATTCCATAG	AATGGGTAAG	CTAGAGTTCT	TATGTGAAGA	GTTTGGGCAT	9540
AAACTTTTAC	CTTTTCCTCC	CTACTCATCT	TAGTATAGAA	AAGTGAATCT	GAAATAGTAC	9600
ATAACTGCTT	CTAAAACATT	CTTATAAATT	GATTTAAATT	CTCAAATCAT	ATTATTTCAGT	9660
TCTTATTTCA	TTTGTGTTCTA	CAATCCTGTT	GAGAAGACAC	GTGTTTCATAT	CAAAAAGGTA	9720
TTGGCAAGTT	GCAATACCTT	TTTACGAGGC	TCTGTTGTCT	TATTTTTGTT	TCAACTGACT	9780
ATATCTCCTA	TGGTTCTAGT	TCAGAAGGCT	AGGCTATAAT	TATGATTGAT	AAGAAGTATC	9840
ATTCCAAGTA	TTGGGAGTGA	ATGTTTCAAA	ATCATGGGTT	TCTATAATGG	TCAGGCTGGC	9900
ATTTGCTAGA	CCGCCATCTT	TACGAAGAAG	TGGTTCTTTA	TAGCCTAGGA	GAGTACGAAG	9960
ACTGGCAGTA	AGATTGGCGC	CGTGTCCGAC	AATTAGAATA	CGTTCAGCTG	GACTATCTTT	10020
TAATGATTTG	ATAAATTGGA	TGGTCCGTTG	AGTTGTACTA	TAGAGGGATT	CGGCTCCGAA	10080
CATTTCGAGT	TCAAATTGAG	CAAGATTTGA	ACGAAAAGCC	TGGATTTGTT	GCGGGTAAAT	10140
AGCTTCCAAG	GTGCAATTT	TCAAACCTTC	TAACCTCCCA	AGTTGCCATT	CACGGAGATT	10200
AGGAACGATT	TCTAAAGAAC	AGGGGGTATA	GAGTTGACTT	TGGATAATCT	CAGCAGATTT	10260
GACCGCTCGA	GGTAAATCAC	TTGAATAAAT	CTGATCAAAA	GGAATTCCTT	TGAGATACTG	10320

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ACCAAGTCGT TTTAGGGTTT CAATGGATTC AGGAAGAAGA GGAGAATCAC CACTAGCACC	10380
TTGAAAACGA CCTTCTTGGT TCCAGAGGGT ACGACCGTGG CGGACAAAGT AGAGTTTCAT	10440
TACTTGATGT CCTCCAAAAT ATCTACAAAG TCTGCCTTTA CAAAGCTAGC CAAGTCTTGT	10500
GGCGCGACGA TAATGCTGTG TCCGACTTCG CCTGCAGAGA CAATCATTTG ATCCAAATCT	10560
AGAGCAATTT TATCGATAAA AATGGGATAA TTGTGTTTCT GACGAATTCC GACAGGATTA	10620
TTGGCTCCAT GAATGTAACC AGTTGTTTTT TCTAAGTCCT TTTGTGGAAT CATGCTCACT	10680
TTTTTATTGC CAGAAATTTT AGCTAGTTTC TTTTCAGACA AGTGCTGAGT GATAGGGACA	10740
ATTCGATAA TCGGTCCGGT CTTGTCTCCC AAAAGCGCCA AGGTTTTGAA AATCTGATCT	10800
CGTTCATAAC CTTGAGGAAG CTCTCCTTCT AGGGCATTGA TTTGAATCCC CTGATGAGGG	10860
ATAGCTGCTT TAGATAGGAT TTGTTCCACC AATGTTTTTT TGATTTTAAC TTTTTTTGCC	10920
ATTATTTATA TTTATCCTCC AATTGACTCA TCCAAATACC AAGCCAGATT CCCAGCGCAA	10980
AGAAGAAGGC GATGATGACA TAACCGACAA GTGAAAGTCC TGTGTATTGG ATACTTTCAG	11040
CGTTTCCTGC ATTTGGAATT AAGATCAAAA GGGTACTTGA TAGGACGATA CCGATGATGA	11100
AATGATAGAC GAACTGTTTA CGGAGTTCTT CTAGTTCCTC GTCCGTCCAA GCGTAGGCCA	11160
CTTCTTCTTT CTGCTTTTA CCTTTGGACA TCTTGTAAG AGGTGGGAGG GCAATATAGA	11220
CATGACCTGC CTCGACTAGC GGACGCATGT AACGGTAGAA AAATGTCAAG AGCAAGGTCT	11280
GGATATGGGC ACCGTCGGTA TCCGCATCG	11309

(2) INFORMATION FOR SEQ ID NO: 109:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 5548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 109:

CCATAGTCTA ACAAGTCTTT GTAAAGGTTT ATCCCTGATT CATGTAAAGA TTGTGTAAAG	60
AATCAAAAAA AGCCACTTTT GAAAAATGGC TGCTCCTAAA AATAGCTTTA AAAATTATTA	120
GTCTGTGCG AAAGATTGGT TAGGAAGAAA AATCGTGAAG CAACTGCCTC TGCCAAGCTG	180
ACTCGTCACC GTGACTTGGC CACCTAATAA TTGACTGAGT TCTTTGACAA TGGCAAGGCC	240
AAGACCAGTG CCACCAGTTT GTCTGCTTCG ACCTTTATTA ACTCGGTAAA AACGTTCAAA	300
AATACGATCC TGCTCTAATT GACTAATACC AATCCCTGTA TCTGATACAG AAATCTTAAT	360
GCCTTCGTTT ACCTTTTGGG TCTTGACCTC AATTTTCCC CCTTGTTTCAG TGTAACGGAT	420



801

GGCATTGGAT AAAAGATTGA GTAAGATTG GGAAAGTAAT TGAATATCTG ATACGAGGGT	480
GACATCATCT GGCACCTGCA CCTTTAGCTG TAAATCCTTC TTCTTGAGCT GAGGTTGCAA	540
GCTTTGAGTC AAATCCTGTA CAAATCTGTC CAAAGAAAGG GTCGTCCATT GTATAGGCAT	600
TTGTTGAGCC TTAGATAAGG TAAGAAGATG CTCAACAATA TGCTCAAGAC GCAAACCTTC	660
TTTGTAATA ATGTCTAGAA AGTCATCCTT GAGCGCTTCT TCTTCAGCTG ACATCCCCTT	720
AATGGTTTCA GCAAAGCCCT TAATCGAAGT AACTGGTGTC CTCAATTCAT GGGAGGCATT	780
TGAGACAAAG GCTAAATTTA ACTTTTCATA AGTTCTAATC GTTGTTAAAT CATATAGCAA	840
GACGAGCACA GCTTCCACAG ATTGGGTGGG GCTAAAAACG GGAAGTGTGTC TCACTTCTAA	900
AATCAAGTCA CCCTCATGAA ACCCACTTAC TTCTTGTTTT AACCTTGTTT TTTGATCAAA	960
GGCTTGGTGA ACTAAATTCC GAATATCCAT CCGTTTGAGG TCATCAAGTG AACTTATGTC	1020
GCCGTCCACA TCGGGAAAAT AATGAGGCAG AGAGCGACTG GATAATAACA TCTGACCTTG	1080
AGCGGAAACT AAAAACGTCC CCATGGTTAG GTGCGACAGA AGAACCTCCA TTGTTTCGGC	1140
TAGATCCTTG TATTGCTGAT CCTGTTGGGA GACTTTGGTT TTTAGGCCAG ACACATACTG	1200
AGCCAAAGAC TTTAAGTCTT CTTGCCCTTT TTCTAAAAAG TATTCACTAC TGGTCAAGAG	1260
AGGTTGGTGC AAGGTCTCAA AAGCAACTTC CCATTTCCAA AGGCAAAAGA GCCAGTAGCC	1320
ACCTAGTCCC AAAGAAAGGG CTAGAAGAAA GAGACCGATG CCTTTACTGA TCCAAGTTAA	1380
TGCCATCCCT GCAATCAGAA TGAGGCTAAC ACTTAGATTG ACTAGCCAAA ATTGAAGGTA	1440
GCGTTTCATC TATAACTCCT TGAACCTATA ACCATAACCC CGAATGGTTC GAATAAATTG	1500
AGGGGCTTTA GGATTGTCTT CAATTTTTTC CCTCAACTTA CCAATATGAA CGTCCACCAA	1560
ACGTGTTTCC TGCCCAAAGT CATACCCCCA GATACGTTCC AAAAGACGCT CTCTAGTCAG	1620
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CAGTAACTTA TTCGCCCTGT AGACTTCATG ACGCTCAGGG TATACTTTCA AGGTCCCAA	1740
TAGCCAAGAA TCGTCAGCGA TATTATCTGA ATCATCTCCT TCTTGTTCTC CTTTAGTTCTG	1800
CCTGAGGACA GCCTTGACAC GCGCCAGCAA TTCTCTAGGG CTAAAAGGCT TGGTCAAGTA	1860
GTCATCAGCC CCTAATTCCA AGGCCAAAAC CTTATCAAAT TCATCACTTT TCGCAGAAAC	1920
CATCATAATT GGAGTTTGA CGCCTTTGGC TCTCAGCCGC TTACAAACTT CCATGCCATC	1980
TAATTGTGGT AACATGATAT CAAGCAAGAT AAAATCAAAG GGTCTGTTT CTGCCAAAGC	2040
TAAGGCCTTC CGTCCATTG TCACCAATTG AGTAGAAAAG CCTTCCTTAC TTAAATGGTA	2100
GTCAAGCAAT TTCAGAATGT GTTCTTCATC ATCCACTAAT AAGACTTGTT TTGTCATCTA	2160

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TTATCTCCTA	TTGGTAACAT	TATAACACAA	TTATCAGAAA	TCCTAACATT	GCTAAATCAG	2220
ATTAAATTTG	CCTATCAAGA	CTAGTATCTG	GTCAAACGCT	CAATCATCTC	CTTGTGCTCT	2280
GGATAGGTCG	CCAGTAGATC	TACCCTTTCA	AATAATTCAA	AATCCTCAAA	TTCAAAACCA	2340
GGAGCAACAA	GACAAGAAAC	CAGAGCATCA	TCCTTATCAA	CTGTGATCC	CCAAATAGTG	2400
CCCTTAGGAA	CACAGTAGTG	AAGTTGTTGC	CCTTTGGATA	TGTCCAGGCC	TAAAGTGACT	2460
GCTTCGTAGT	GACCATCTGC	TGTAATCATG	TGAACAGTAA	GTGGGGATCC	TGCATGAAAA	2520
TACCAGATTT	CATCTGCTGT	CAATCGGTGA	AAATGTGAAG	GATTTCGTTT	TTCTAATAAG	2580
AAATAAATAC	TGGTATAAAG	CGCCCTTCCC	TTACCAGCAA	GGTTTATAGT	GTCTGAAGCT	2640
TTTTTTGTTT	GTCTAAAATA	GCCACCTTCA	ATATGGGGAG	CTAACTCTAG	AGTTCTTATC	2700
AAGTCTTCTT	TATCCGTCGG	AGCCAATGGG	TTGAAGTAAC	TCTTGTTCAA	AGTGGTTTTA	2760
CGATTTCAAG	AACTCCTCTC	AGTTC TGAGG	ACACGGTAAT	GATTGATGCG	ACGGAAGTAC	2820
AAATCAATCG	CCCTAAAAAA	AGAATTAGCG	AATGATTC TG	GTAAAAAAA	TGCCACGCTA	2880
TGAAGGCTCA	AGCGATTGTC	ACAAGTCAAG	GGAGAATTGT	TTCTTTGGAT	ATCGCTGTGA	2940
ACTATTGTCA	TGATATGAAG	TTGTTCAAAA	TGAGTCGCAG	AAATATCGGA	CAAGCTGGTA	3000
AAATCTTGGC	TGACAGTGGT	TATCAAGGGC	TCATGAAGAT	ATATCCTCAA	GCACAAACTC	3060
CACGTAAATC	CAGCAAATC	AAGCCACTAA	CAGTTGAAGA	TAAAGCCTAT	AACCATGCGC	3120
TATCCAAGGA	GAGAAGCAAG	GTTGAGAACA	TCTTTGCCAA	AGTAAAAACG	TTTAAAATGA	3180
TTTCAACAAC	CTATCGAAAT	CATCGTAAAC	ACTTCGGATT	ACGAATGAAT	TTGATTGCTG	3240
GCATTATCAA	TCATGAACTA	GGATTCTAGT	TTTGCAGGAA	GTCTATTATT	TGGTTAGGTG	3300
AATTAGTGAA	GCGTTTAGGC	AAGTGTCTCT	GGTTACGACG	TCATGGACTC	TAAATCGATT	3360
ATATTTAGGG	GTCATGACTA	GTGAAGCAGT	TAGCTAGTTC	GCATATAAGC	GGCTAGCGTC	3420
TAACAATTAG	GAACTTTAGT	TCCAATAACT	TTAAGATTAC	GACGTTT TAG	GACATAAATC	3480
GATCATATTT	ATGTCCTAAA	ACTAGTGAAG	CGCCTAGCCA	AAGTCCGAAT	AGGATTTGGC	3540
GTTAGTTACT	TAGATTGCTT	TGCAATCAAG	TAACTTTGGC	GATTTACATC	TTCTCTGGCG	3600
CTTCTACTCC	AAGCAAGCGA	AGGGCTTCTT	TGAGAACGAC	TGCGGTTGCG	TAGCTGAGGG	3660
CTAGACGGCT	GTCGCGTICT	GGGCTTTCAT	CCAAGATACG	TGTATGTGCA	TAGTATTTGT	3720
TAAAGGATTG	AGCCAGGCTA	ATTGCAAATT	TAGCAATGAT	AGAAGGTTCA	AAGTTATCTG	3780
CCGCACGGTT	GATAATACGT	GGGAAGTCTT	GAATGAGTTT	AATGATTTC	CAGCTTTCAG	3840
TATCATTCAA	GCTATAGTTG	CCAGCTGTTT	CTGGTTTGAA	ATCGGCTTTG	CGTAAGATAG	3900
ATTGGATACG	AGCGTAGGCA	TATTGAACGT	AAGGTCCAGT	TTCACCCTCG	AAGGATACCA	3960

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TAGCCTCTAG	GTCGAAGTCG	TATCCATTG	TACGGTCGGT	TTTGAGGTCA	TAGAATTTAA	4020
TGGCTCCAAT	CCCAACAGCA	TGTGCTACTT	GGTCTTTGTT	TTCTAGTTCA	GGATTTT TAG	4080
CCTCGATTG	GACCTTGGCA	CGGCTAACAG	CCTCTGCAAC	AGTAGGCTCT	AGCAAGATGA	4140
CATTCCCTTT	ACGAGTAGAG	AGTTTCTTCC	CTTCTTTTGT	AACCAAACCA	AAAGGAACGT	4200
GAGTAATGTC	GTCACTCCAG	TCGTAGCCCA	TCTCTTGCAA	GACAGCTTTG	AGCTGTTTAA	4260
AGTGGGCAGA	TTGTTCTTGA	CCAACGACAT	AGATAGATTT	AGCAAATTGC	TATTCGTTTT	4320
TACGGTAGAG	GGCTGCAGCC	AAGTCACGTG	TGATATAGAG	AGTTGCACCA	TCAGACTTCT	4380
TGATGAGGGC	TGGATGTTCA	ATTCCATATT	TCTCAAGATT	CACAACTTGG	GCACCTTCTG	4440
ATTCAAGAAG	TAGTCCTTTT	TCAGAAAGAA	TGTCTACAAC	TGCATCCATC	TTATCATTTGT	4500
AGAAGGCTTC	TCCGTTATAG	CTGTCAAATT	CAACCTTCAA	TTCATTGTAA	AGGCGGT TAA	4560
ATTCCACTAA	ACTTTCATCG	CGGAACCATT	GCCAAAGAGC	GAGAGCTTCC	TCATCTCCAT	4620
TTTCAAGTTT	ACGGAACCAT	TCGCGCGCTT	CTTCATCCAA	GCTAGGGTCA	TTTTTCAGCTT	4680
CAGCGTTGAT	GCGGACATAG	AGTTTAAGGA	GTTTCATCGAT	TGGATGAGCT	TTTACAGCTT	4740
CTTCGTCGCC	CCATTTTTTG	TAGGCAACAA	TCAACATCCC	AAATTGTTTA	CCCCAGTCTC	4800
CCAAATGGTT	GACCTTGACC	GTTTGATAAC	CGATTTTTTG	GAAAATATGT	GACAAGCTAT	4860
CTCCGATAAC	AGTTGAACGC	AGGTGGCCAA	TAGAAAATGG	TTTAGCGATA	TTCCGACTAG	4920
ACATGTCGAT	AACAACATTT	TCTTGTTTAC	CAATATTTTG	GTCAGCATAG	TGTTCTTTTT	4980
CAGTGGAAC	AGCTTGCAAT	ACTTGAGCAG	AAATGGCAGA	TTTATCAAGG	AAAAAGTTAA	5040
CGTAAGGTCC	TGTTGCGACA	ACTTTTTC AA	AGGCTTGGCT	GTTTATTTTT	TCAGCCAGTT	5100
CAGCCGCAAT	CATTTGTGGT	GCTTTACGTT	CGACTTTTGC	AAGAGAAAAA	GCAGGGAAG	5160
CAATGTCTCC	CATTTCTGAG	TTTTTAGGGG	TTTCCAGTAA	CTTTAAAATA	GCCTCTTG GT	5220
CCAGGCTATC	AATGATGCTA	GATAATTCGC	TAGCAATCAA	TTCTTTTGTA	TTCATTAAGA	5280
GTCCTTTTTT	GGACTTTTCT	ACTATTTTAT	CACAATTTTA	AAGAAAGAAG	AAAAAATTTT	5340
TGAAATCTCC	TGTTTTTTTG	GTATAATATG	GTTATAAATA	TAGTTATAAA	TATGCACGCA	5400
AGAGGATTTT	ATGAGAAAAA	GAGATCGTCA	TCAGTTAATA	AAAAAAATGA	TTACTGAGGA	5460
GAAATTAAGT	ACACAAAAAG	AAATTCAAGA	TCGGTTGGAG	GCGCACAAATG	TTTGTGTGAC	5520
GCAGACAACC	TTGTCTCGTG	ATTTGCGG				5548

(2) INFORMATION FOR SEQ ID NO: 110:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 3132 base pairs

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(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 110:

TACCCGGTAG TCTTAGCAGA CACATCTAGC TCTGAAGATG CTTTAAACAT CTCTGATAAA	60
GAAAAAGTAG CAGAAAATAA AGAGAAACAT GAAAATATCC ATAGTGCTAT GGAAACTTCA	120
CAGGATTTTA AAGAGAAGAA AACAGCAGTC ATTAAGGAAA AAGAAGTTGT TAGTAAAAAT	180
CCTGTGATAG ACAATAACAC TAGCAATGAA GAAGCAAAAA TCAAAGAAGA AAATTCCAAT	240
AAATCCCAAG GAGATTATAC GGACTCATTT GTGAATAAAA ACACAGAAAA TCCCAAAAAA	300
GAAGATAAAG TTGTCTATAT TGCTGAATTT AAAGATAAAG AATCTGGAGA AAAAGCAATC	360
AAGGAACATAT CCAGTCTTAA GAATACAAAA GTTTTATATA CTTATGATAG AATTTTTAAC	420
GGTAGTGCCA TAGAAACAAC TCCAGATAAC TTGGACAAAA TTAAACAAAT AGAAGGTATT	480
TCATCGGTTG AAAGGGCACA AAAAGTCCAA CCCATGATGA ATCATGCCAG AAAGGAAATT	540
GGAGTTGAGG AAGCTATTGA TTACCTAAAG TCTATCAATG CTCCGTTTGG GAAAAATTTT	600
GATGGTAGAG GTATGGTCAT TTCAAATATC GATACTGGAA CAGATTATAG ACATAAGGCT	660
ATGAGAATCG ATGATGATGC CAAAGCCTCA ATGAGATTTA AAAAAGAAGA CTTAAAAGGC	720
ACTGATAAAA ATTATTGGTT GAGTGATAAA ATCCCTCATG CGTTCAATTA TTATAATGGT	780
GGCAAAATCA CTGTAGAAAA ATATGATGAT GGAAGGGATT ATTTTGACCC ACATGGGATG	840
CATATTGCAG GGATTCTTGC TGGAAATGAT ACTGAACAAG ACATCAAAAA CTTTAACGGC	900
ATAGATGGAA TTGCACCTAA TGCACAAATT TTCTCTTACA AAATGTATTC TGACGCAGGA	960
TCTGGGTTTG CGGGTGATGA AACAATGTTT CATGCTATTG AAGATTCTAT CAAACACAAC	1020
GTTGATGTTG TTTCGGTATC ATCTGGTTTT ACAGGAACAG GTCTTGTAGG TGAGAAATAT	1080
TGGCAAGCTA TTCGGGCATT AAGAAAAGCA GGCATTCCAA TGGTTGTCGC TACGGGTAAC	1140
TATGCGACTT CTGCTTCAAG TTCTTCATGG GATTTAGTAG CAAATAATCA TCTGAAAATG	1200
ACCGACACTG GAAATGTAAC ACGAACTGCA GCACATGAAG ATGCGATAGC GGTGCTTCT	1260
GCTAAAAATC AAACAGTTGA GTTTGATAAA GTTAACATAG GTGGAGAAAG TTTTAAATAC	1320
AGAAATATAG GGGCCTTTTT CGATAAGAGT AAAATCACAA CAAATGAAGA TGGAACAAAA	1380
GCTCCTAGTA AATTAAATTT TGTATATATA GGCAAGGGGC AAGACCAAGA TTTGATAGGT	1440
TTGGATCTTA GGGGCAAAAT TGCAGTAATG GATAGAATTT ATACAAAGGA TTTAAAAAAT	1500
GCTTTTAAAA AAGCTATGGA TAAGGGTGCA CGCGCCATTA TGGTTGTAAA TACTGTAAAT	1560

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TACTACAATA GAGATAATTG GACAGAGCTT CCAGCTATGG GATATGAAGC GGATGAAGGT	1620
ACTAAAAGTC AAGTGTTTTTC AATTTCAGGA GATGATGGTG TAAAGCTATG GAACATGATT	1680
AATCCTGATA AAAAACTGA AGTCAAAAGA AATAATAAAG AAGATTTTAA AGATAAATTG	1740
GAGCAATACT ATCCAATTGA TATGGAAAGT TTTAATTCCA ACAAACCGAA TGTAGGTGAC	1800
GAAAAAGAGA TTGACTTTAA GTTGCACCT GACACAGACA AAGAACTCTA TAAAGAAGAT	1860
ATCATCGTTC CAGCAGGATC TACATCTTGG GGGCCAAGAA TAGATTTACT TTTAAAACCC	1920
GATGTTTTAG CACCTGGTAA AAATATTAAA TCCACGCTTA ATGTTATTAA TGGCAAATCA	1980
ACTTATGGCT ATATGTCAGG AACTAGTATG GCGACTCCAA TCGTGGCAGC TTCTACTGTT	2040
TTGATTAGAC CGAAATTAAA GGAAATGCTT GAAAGACCTG TATTGAAAAA TCTTAAGGGA	2100
GATGACAAAA TAGATCTTAC AAGTCTTACA AAAATTGCCC TACAAAATAC TGC GCGACCT	2160
ATGATGGATG CAACTTCTTG GAAAGAAAAA AGTCAATACT TTGCATCACC TAGACAACAG	2220
GGAGCAGGCC TAATTAATGT GGCCAATGCT TTGAGAAATG AAGTTGTAGC AACTTTCAAA	2280
AACACTGATT CTAAAGGTTT GGTAAACTCA TATGGTTCCA TTTCTCTTAA AGAAATAAAA	2340
GGTGATAAAA AATACTTTAC AATCAAGCTT CACAATACAT CAAACAGACC TTTGACTTTT	2400
AAAGTTTCAG CATCAGCGAT AACTACAGAT TCCTAACTG ACAGATTAAA ACTTGATGAA	2460
ACATATAAAG ATGAAAAATC TCCAGATGGT AAGCAAATG TTCCAGAAAT TCACCCAGAA	2520
AAAGTCAAAG GAGCAAATAT CACATTTGAG CATGATACTT TCACTATAGG CGCAAATCT	2580
AGCTTTGATT TGAATGCGGT TATAAATGTT GGAGAGGCCA AAAACAAAAA TAAATTTGTA	2640
GAATCATTTA TTCATTTTGA GTCAGTGGAA GCGATGGAAG CTCTAACTC CAGCGGGAAG	2700
AAAATAAACT TCCAACCTTC TTTGTCGATG CCTCTAATGG GATTTGCTGG GAATTGGAAC	2760
CACGAACCAA TCCTTGATAA ATGGGCTTGG GAAGAAGGGT CAAGATCAAA AACACTGGGA	2820
GGTTATGATG ATGATGGTAA ACCGAAAATT CCAGGAACCT TAAATAAGGG AATTGGTGGA	2880
GAACATGGTA TAGATAAATT TAATCCAGCA GGAGTTATAC AAAATAGAAA AGATAAAAAAT	2940
ACAACATCCC TGGATCAAAA TCCAGAATTA TTTGCTTTCA ATAACGAAGG GATCAACGCT	3000
CCATCATCAA GTGGTTCTAA GATTGCTAAC ATTTATCCTT TAGATTCAAA TGGAAATCCT	3060
CAAGATGCTC AACTTGAAAG AGGATTAAACA CCTTCTCCAC TTGTATTAAG AAGTGCAGAA	3120
GAAGGATTGA TT	3132

(2) INFORMATION FOR SEQ ID NO: 111:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 14672 base pairs

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(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 111:

CGAGATTTCT TTAAATGAAC TACGTGAAAT CTACCCATCA TCCAGATCTG GATATTCTCT	60
CCTATCTATA AGTAAAGTTT TAGGAGATTT TAATATAAGT TCTCATGCTT TTAAAGCTTC	120
GGTAAGAGAT TTAAACCGC TCAGTTTCCC ACTCATTGCG TTCTGGGAGA GTTCTCATT	180
TATTATTCTT GAAAAATTA GTAAAAACAA GTTTTATATT TTAGATCCTG CAAAAGGCAG	240
GCAGAGAATG TCAATAAGTG AATTGAAAG GCATTATTCA AATATCATTT TAACATTTAA	300
AAAGTTAGAT AGCTTTATGT CTCGTAAAGA TAATAAGAAG TCGCCTGTTT TAAAGTATTT	360
TTTAAAGTAT AGGAATAAGC TAGGGATTTT ATTTTTGTGA ACAGCATTAT TGTATGTAAT	420
ACAATCATTA GTACCTATAG CTAATAGATA CATAATTGAC ACGAATTTCA AGGACGATTC	480
GTATTCGTCT AGAATGTTAT TTAATATATT ATTTATATTT ACTGTTTCAT TCTCACTAAT	540
GTATTTATTA AGACAGATAT ATGTTGCATC CTTAAATAT ATAATGGATA AAGAGATTAG	600
CTATGATTTT ATGAAACATT TGATATATTT ACCTTACAGT TTTTATGAAA AACGTACTTT	660
AGGGGATATA CTTTTTAGAG CTAATCTAT TGTATATATA AGAGAAATAC TATCAAATAA	720
TTTTATAGCA GCTATACTTG ATTTGTTAAT GATTGTGGTT TATGCTGTGG TTTTATTTAG	780
CTTTTCTAAG TACATGGTAA TCTTTTAAAT ATCACTAAGT CTAGCTCTAT CTATTGTAAT	840
GTATCCAATC ATAAAAATCT CAAAAATTT AATTGATAAA AATATAAAAG AAAAGGTTAA	900
TGTTCAAAAT ATTACTTCCG AAGTAATTTT TAAAAATAGT GATATTAAGC TAACTGGAGA	960
AGAGGAATTT TGGATTAACA AATGGGATAA TTTAATACA AAACAGCTCA TCATAGGTCG	1020
AAAACCTGAT ATACATTTAT CAATTGTTAG TAGTATAACG AATGTTTTAC AAATTATTCT	1080
CCCTGTTTTG ACCCTTATTG TAGGTGTAAT TATAAAAACA TTCGAACAAT TGACGTTAGG	1140
ACAAATTGTA GCAATAAGTA CAGTCTCACC ATACTTTATT TCTCCTATAA TTTCTTTAAG	1200
TGATAACTAT ATACAATTAA TGTATTAAA GGGATATTTT TTAAGAATAG AGGATGTGTT	1260
TAATACTAAA TCCGAATTAA TTCCAGAAAG AGTCAGTCAA GATATAAAAT TTGATAAAAA	1320
AATAGAATTA AAAGATATTT GGTATAAATA TGGATTATTT GATGATTATG TTTTGAAAGG	1380
AATAAATGTT ACTATTAAAA AAGGAGAAAC TGTTGCTATT GTTGGAGAAT CAGGTTTCAGG	1440
TAAGAGTACA TTAGCTAAAA TTTATTAGG TTTATTAGAA CCTAATATTG GTTCAATAGA	1500
AGTTGATGGA GTAGAAAAG AAGAAATTGG TCAAACATTG TATAGAAAGA TTTTGTGAGC	1560

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AGTGTACAA AATTCAACCC TAAGTTATGG TACCTTAAGA GAGAATTGA CATTTGGACA	1620
CTTTGTTTCA GATGAAGAAT TAATGACAAA TCTAAATTCA ATTGGTCTTA GCAATGTAGT	1680
TAAATCTTTA CCTCTTGGAT TAGAGACAAT CATCGCTGAA GAAGGTAATA ACTTTTCTGG	1740
AGGGCAGCAG CAAATGATAC TTTTAGCTCG TTGTCTTTTG TCGAAACCTT CGGTAGTTGT	1800
TTTGGACGAA GCAACAAGTA GTTTAGATAA TTTATCTCAA CAAATTACAA CTTCTTACTT	1860
AAGTGAAATC GGTACCACTA AGATTTTAAT TGCCCATCGA CTAGATACTA TCAAGTCTGC	1920
AGATAAGATC TTAGTAATGC ATAATGGTGA AATTGTAGAG ATTGGGACCC ATAGAGAACT	1980
TCTTGAAC TAAGGCATTT ATAAGCAATT GTATTCAAAT AATTAGTTT TGATTAAAAG	2040
GGTAAATTTA TGAAGATTAT GAAAAAAAAA TATTGGACTT TAGCGATATT ATTCTTTTGT	2100
TTGTTCAATA ATTCTGTTAC TGCTCAAGAA ATACCTAAAA ATCTTGATGG CAATATAACT	2160
CACACTCAGA CTAGCGAAAG TTTTCTGAA TCTGATGAAA AACAGGTGA CTATTCTAAT	2220
AAAAATCAAG AAGAAGTAGA CCAAAATAAA TTTCGTATTC AAATCGATAA GACAGAATTA	2280
TTTGTAACAA CAGATAAACA TTTAGAAAAA AACTGTTGTA AATTGGAAC TGAACCACAA	2340
ATAAATAACG ATATTGTTAA CTCTGAAAGT AATAATTAC TAGGCGAAGA TAATTTAGAT	2400
AATAAAATTA AGGAAAATGT TTCTCATCTA GATAATAGAG GAGGAAATAT AGAGCATGAC	2460
AAAGATAACT TAGAATCGTC GATTGTAAGA AAATATGAAT GGGATATAGA TAAAGTTACT	2520
GGTGGAGGCG AAAGTTATAA ATTATATTCT AAAAGTAATT CTAAAGTTTC AATTGCTATT	2580
TTAGATTCAG GAGTCGATTT ACAAATACT GGATTACTGA AAAATCTTTC AAATCACTCA	2640
AAAACTATG TCCCAATAA AGGATATTTA GGAAAAGAGG AGGGAGAGGA AGGAATAATA	2700
TCAGATATTC AAGATAGATT AGGTCATGGT ACGGCTGTTG TAGCTCAAAT TGAGGGGAT	2760
GACAATATTA ATGGAGTAAA TCCTCACGTT AATATTAACG TCTATAGAAT ATTTGGTAAG	2820
TCGTCAGCTA GTCCAGATTG GATTGTAAAA GCAATTTTGT ATGCTGTAGA TGATGGCAAT	2880
GATATTATCA ATCTTAGTAC TGGACAATAT TTAATGATTG ATGGAGAATA TGAGGACGGA	2940
ACAAATGATT TTGAAACATT TTTGAAGTAT AAAAAGGCTA TTGATTACGC GAATCAAAAA	3000
GGAGTAATTA TAGTAGCTGC ATTAGGGAAT GACTCCCTAA ATGTATCAAA TCAGTCAGAT	3060
TTATTGAAAC TTATTAGTTC ACGCAAAAAA GTAAGAAAAA CAGGATTAGT AGTTGATGTT	3120
CCAAGTTATT TCTCATCTAC AATTCGGTC GGAGGCATAG ATCGCTTAGG TAATTTATCA	3180
GATTTTAGCA ATAAAGGGGA TTCTGATGCA ATATATGCGC CTGCAGGCTC AACATTATCT	3240
CTTTCAGAAT TAGGACTTAA TAACTTTATT AATGCAGAAA AATATAAAGA AGATTGGATT	3300

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TTTTCGGCAA	CACTAGGAGG	ATATACGTAT	CTTTATGGAA	ACTCATTTGC	TGCTCCTAAA	3360
GTTTCTGGTG	CGATTGCAAT	GATTATTGAT	AAATACAAAT	TAAAAGATCA	GCCCTATAAT	3420
TATATGTTTG	TAAAAAAATT	CTGGAAGAAA	CATTACCAGT	AAAAAATGGT	ATAAAAGTGT	3480
TAAATATACC	AAACGTATTG	AGATATGATT	TGAATATGTT	ACAATTAGAA	TATAAAAAATG	3540
AACAAAGTTG	GGATAGTTTC	ATAGATAATG	TTAATTTAAT	TGAGTTGGAA	GAGAGAATTC	3600
AAACTACTAT	TGGAATTAAA	CAAATAAACA	CACACAATAT	TATTACTATT	GCCCCGAGAAG	3660
GGTACTCTCA	AAATTATTTA	CCTAACACTT	CAGAAAATAC	ATATAATTCA	TTACAAGTCA	3720
GTTTAGTTGG	AGTATTACTA	CTTTTTATAA	GTATGGTAAA	TATTTTATGG	GCTAAAAAAA	3780
GTAAATGAAA	ATAAAATTTG	GAGCCCTCTG	AAAAAGTAAG	TCCTACAGTT	CAACTAAAAAT	3840
GAGTCAAAAG	ATGAATCACC	TTGATGTAGG	GGAGTTTGTC	TTATTGCTGC	CTGAACACCT	3900
CCGTTTCAGAG	GAAGAACATT	ATAAATCTGT	TTTTGAAGAC	GACTTAACCA	GTGCGCATATC	3960
TAGTCAAGAT	GAACGACAGC	AAATGACTGC	TACGGTAGGT	TATTTAGAAT	CAGGTCAGGA	4020
TCGTTTTGTG	TATAATACGA	CCCCTATTTC	TTACCAGCAG	TTTTTGAAAG	ATCCAATCAT	4080
CATTGTTATA	ACACCCCAAT	CAACTGGTCC	ACAGTCCATT	TTGTTTTGGA	TAGACGCAGT	4140
ACAGAACTAC	GTTCTCTTTA	ATCAATGTGC	TGATGCCCAG	GAGCTTATCC	AGAGACAAGG	4200
CATTGAAAAT	TGGGTCTCAG	AAATGCAAAC	AGGTTACCAC	AACTACATCA	CATTATTGGA	4260
TAATATCCAG	AGGGAACGTT	GGGTAATGCT	AGCAGGAGCT	GTGCTTGGGA	TTGCAACTTC	4320
AATCTTGTG	TTTAACACTA	TGAATAGGCT	CTACTTTGAA	GAATTTAGAC	GTGCCATTTT	4380
TATCAAACGC	ATTGCAGGTC	TCAGGTCTTT	AGAAATCCAT	CGCACTTATC	TCTTTGCTCA	4440
ACTGGGTGTG	TTTTTACTGG	GATTTGTTGC	GAGTGTATTT	CTTCAGGTAG	AGATAGGAGT	4500
TGCTTTCTTA	GTCTTGTTAC	TCTTTACTGG	TCTATCTCTT	TTACAGTTAC	ATGTCCAAAT	4560
GCAGAAAGAA	AACAAGATGT	CCATGCTTGT	TTTGAAGGGA	GGTTAATATG	ATTGAACTTA	4620
AACAGGTGAG	TAAATCTTTT	GGAGAACGAG	AGTTATTTTC	GAATCTTTCA	ATGACATTTG	4680
AGGCTGGAAA	AGTCTATGCC	TTAATTGGTT	CAAGTGGTAG	CGGAAAAACA	ACCTTGATGA	4740
ACATGATTGG	GAAATTAGAA	CCTTATGATG	GGACGATTTT	TTACCGAGGT	AAAGACTTGG	4800
CCAATTATAA	ATCAAGTGAT	TTTTTCCGTC	ACGAATTGGG	CTACCTCTTC	CAGAACTTTG	4860
GCTTAATTGA	AAACCAAAGT	ATTGAAGAAA	ACCTTAAGCT	AGGTCTCATT	GGTCAAAAGT	4920
TGAGTCGGTC	GGAACAGCGG	TTGAGGCAGA	AGCAGGCTTT	AGAACAGGTC	GGCCTGGTTT	4980
ATCTTGACCT	AGATAAGCGC	ATCTTTGAGT	TATCGGCGG	AGAATCGCAA	CGGGTTGCCT	5040
TGGCAAAAAT	TATCTTAAAG	AATCCACCCT	TTATTCTGGC	AGATGAGCCA	ACAGCTTCAA	5100



TAGACCCAGC AACCTCTCAG TTGATTATGG AGATTTTGCT ATCTCTTCGA GATGATAATA	5160
GGCTAATCAT TATCGCAACA CATAATCCGG CAATTTGGGA GATGGCTGAT GAAGTGTTC	5220
CGATGGATCA TCTGAAATAA AAATCCTTGT TTTTAATTGC ACGATGAGTT ACTGAAATAT	5280
TATCATGAAT CAAGAATTGG AGTTAATTTA GAATTGTAAT TAATTTAGAA TTGTACTTTA	5340
TTAATATTGA GGTAACTTT TCTTGATAAA GGAAGAAATA ATGGAGAGGA AGTTAGAATG	5400
AAAAAATTCG ACAATTATAT TATTGAGAAG CCTTGCGATT CTAATTCAGA TAAACTGCAA	5460
AAAATCTTAA TAATTGAAAG TTTGGTAGAT GATATTTTGC AATTTTCTCT CAGAATCAAT	5520
AATAGTGTAG GAGAGATTTT CCTCCTACAA CCGTTTTAAA AGAAAACAT CTTTATTCCA	5580
TGTTATTTTG AGGAAGATAT TGTGAAAGTC AAAGATGATG ATAAAGTTGA GTGGAATTTG	5640
TTAGAATTTT AAAAATTTAG AGCATTTTTG GCTTAGTAAT CTGTGTTGAA GGCTCAAAAC	5700
CTATGGTAAA AAAGTAGCTT TGAACACGTA TTGCCTCCAA AGATTTAGTT AAATAATGAT	5760
TTAACACAAA AAGAAATTAT TGAAGTCTG GAAAGATGTT GTTTCAGTAT TGAGAAAAGG	5820
TGGGAAAAAC TTGCGATTTT CACAGAGAAA GGAAGAAAAA GTATAGAAAT ATAGTCAATT	5880
GAAACAAGAA CAGGATAAAA GAACCTTTTG TGCCATATTT TTCTCCTTTC GCTTTACAAT	5940
TGGATTGAAC ACCTTTATTG TATCGCGTTT GGAGTTTTTT TGGTATAACC TTCGACGCAC	6000
ACCCGCATAG CGGGTGTTTT TTTTGTCTCG CACCTAACGG AGCGAGACAA ACTAATAGTC	6060
ACTTAATCAA AAAACGCACC ATATCAAAAA CTAAAAAGTT TGATATCATG CGTCATGTCT	6120
TAACTAATT GACTATACTT TCTATTCAA TGAGCTTTTA ACCAATTGAT TGAGCCAATC	6180
CACTCTTAAA ACCAAAGAGC AATTTCTCGC TTAGCTGACT CTTCTGAATC TGAACCATGT	6240
ACAACATTTT GGATAATCTC ATTTTCTCCA GCAGCTTTTG CAAAATCACC TCGAATAGTG	6300
CCTGGTAAAG CTTCTTCTGG ACGAGTTGCA CCCATCATGG TCCGCCAAGT TTCGATTACT	6360
TTGGGACCAG AAATGACACC CACAAGAACT GGACCTGAAG TCATGAATTC ACGAATCGGT	6420
GGGTAAAAAC TCTGACCAAC CAAGTCCTGA TAGTGCTGGT CAATCAACTC TTCTGAAACC	6480
TGTGAACGAA ACTCCAATTT TTCGATTGTA AATCCACGTT GTTCGATGCG CTTTAACACT	6540
TCACCCACTA GCCCTCTTTT TACACCATCT GGTTTGATGA TAAAGAATGT TTGTTCCATA	6600
CCCGTCTCCT TTGTGAGCTT CTTTCTTTTA TTTTACCACA TTTCGTGGAA AAATGGAGAA	6660
AGTTTTCAGA AGAGAGAATG AGAGAACCCT CGGGTTCTCT CATTCTCTCT TATTCTACTG	6720
TTTCTTCCAC AGTTTCAACG GCAGTATCCA CAACTACTTC TGTTGTTTCT TCATTTCCTT	6780
CTTCCTCTAC TGGAGGATTA AGGTATTCTT CTCGTTGAC AGCATGTGGT TCAAGGTTAC	6840

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GGTAACGGGC	CATACCAGTA	CCAGCTGGGA	TGATCTTACC	GATGATAACA	TTTCTTTTAA	6900
GTCCAAGGAG	ATGGTCTTTC	TTACCACGGA	TAGCTGCGTC	AGTAAGGACA	CGAGTTGTTT	6960
CCTGGAAGGA	AGCCGCTGAC	AAGAACTGT	TTGTTTCAAG	TGAGGCTTTG	GTAATTCCCA	7020
TAAGGACTGG	GCGACCTGTC	GCTGGAATC	CACCTGCGAT	AAGGACATCT	TTGTTGGCAT	7080
CTGTAAAGTC	ATTGATATCC	ATGAGGGTAC	CCATGAGAAG	ATCTGTATCA	CCTGGATCCA	7140
TGACACGGAC	TTTACGGATC	ATTTGACGAA	CCATTACCTC	GATGTGTTTG	TCACCGATTT	7200
CTACCCCTTG	GCTACGGTAA	ACTTTTGTGA	CTTCACCGAG	AAGGTACGTT	TCAACTGACA	7260
AGACATCAG	AACTGCAAGG	AGACGTTTGT	GTTGGATAGA	ACCTTCTGTC	AGAGCAGCAC	7320
CACGCGCTAC	TTGGCCCCCA	ACTTCGACAC	GCATACGAGC	TGTAAATGGA	ACGACATATT	7380
CACCTTCGCC	AGTTTCACCC	TTAACAAAGA	CTTCTTGGT	ACGAGTTGAT	GCATCTTCTT	7440
CGATAGCAGT	AACTTGTCCCT	TTAACCTCTG	TAATAACCGC	TTCCCCTTTA	GGATTGCGGG	7500
CTTCAAAGAT	TTCTTGGACA	CGAGGAAGAC	CCTGAGTGAT	ATCGGTATTT	GAGGCAACCC	7560
CACCTGTGTG	GAAGGTACGC	ATTGTAAGCT	GTGTACCAGG	TTCCCCGATA	GATTGGGCAG	7620
CGATTGTACC	AACTGCTTCA	CCAACTTCAA	CCGCATCACC	AGTCGCCAAG	TTGATACCGT	7680
AACAGTGACG	GCAGACACCG	TGACGAGTGT	TACATGTAAA	TACAGAACGG	ATAGTCACTT	7740
CTTCCACACC	AGCATTGACA	ATTTACGCG	CCTTGCTCTC	TGTAATCAAT	TCATTTGGAC	7800
CAATAATCAC	TGCACCAGTT	TCTGGATGTT	TAACAGTTTT	CTTAGTGTA	CGACCGTTGA	7860
GACGCTCTTC	GAGAGACTCG	ATCATCTCTT	TTCCTTCTGC	GATAGAACGG	ATCAAGAGAC	7920
CACGGTCAGT	TCCACAGTCG	TCCTCACGGA	TGATAACGTC	TTGGGCAACG	TCGACCAAAC	7980
GACGAGTCAA	GTAACCTGAG	TCGGCTGTCT	TAAGGGCCGT	ATCGGTCATA	CCTTTACGAG	8040
CACCGTGAGT	TGAGAAGAAC	ATTTCCAATA	CCGACAAACC	TTGCGGAAG	TTTGAAAGGA	8100
TTGGCAATTC	CATGATACGT	CCATTGCGAG	CAGCCATCAG	ACCACGCATA	CCGGCAAGCT	8160
GTGAGAAGTT	TGAGATGTTA	CCACGGGCTC	CAGAGTCCAT	CATCATAACG	ATTGGGTTCCT	8220
TAGGATCTTG	GTTAGCAATC	AAGCGTTTCT	CAAGTTTTTC	ACGGGCAGCA	CGCCATTCAG	8280
CTGTAACAGC	ATTGTAACGC	TCGTCGTCTG	TGATCATACC	ACGACGGAAT	TGTTTGGTGA	8340
TTTGTTTCGAC	ACGTTTGTGT	GATTCTTCAA	TGATTTCAGC	CTTGTCATCA	ACGACTGGGA	8400
TATCGGCAAT	ACCCACTGTC	AATCCTGCAA	GAGTTGAGTG	GTGGTAACCG	AGGTTCTTCA	8460
TGCGGTCAAG	TAGGGCAGAA	GTTTCTGTCTG	TACGGAAACG	TTTGAAGATT	TCAGCGATGA	8520
TATTTCCAAG	GTTTTTCTTC	TTGAATGGAG	GGTTGAGCTC	AAGATTGCTG	ATAGCTTCCT	8580
TGATATCTCC	ACCAAGTGGC	AAGAAGTATT	TAGCTGGAAC	ACCTTCTGTC	AAGTTGGCAT	8640

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TGTTTGGTTC TTGCAAGTAT GGTAGCCCCT CTGGCATGAT ATCGTTGAAG AGAATTTTAC	8700
CAACTGTTGT AAGCAAGACC TTATGTCTTT GCTCTTCTGT CCAAGGCTTG TTGAGGCTGT	8760
CTGTGCGAT ACCAACACGT GAGTGGAGGT GAACATAACC ATTGCGGTAA GCCATAACCG	8820
CTTCGTCACG GTCTTTGAAG ACCATTCCCTT CACCTTCGCG ACCAGCTTCT TCCATGGTCA	8880
AGTAGTAGTT ACCCAAAACC ATGTCCTGAG ATGGAGTAAC TACCGGTTTC CCATCTTTTCG	8940
GGTTCAAGAT GTGCTCAGCA GCTAGCATGA GGATACGAGC TTCTGCTTGT GCTTCTTCTG	9000
AAAGTGGTAC GTGGATGGCC ATTTGGTCCC CGTCAAAGTC AGCATGTGTAG GCTTCACAGA	9060
CAAGTGGGTG CAAGCGAAGA GCCTTACCAT CAATCAAGAC TGGCTCGAAG GCTTGGATAC	9120
CCAAACGGTG AAGGGTCGGT GCGCGGTTCA AAAGCACTGG GTGTCTTTA ATCACTTCTT	9180
CAAGGATATC CCAGATACGC TCATCTCCGC GTTCCACCAA GCGTTTAGCT GCTTTGACGT	9240
TTTGCACGAT ATCACGGGCA ACGATTTCAC GCATGACAAA TGGTTTAAAG AGTTCAATCG	9300
CCATTTACG CGGCACACCA CATTGGTACA TCTTAAGAGT TGGACCAACG GCGATAACTG	9360
AACGTCCTGA GAAGTCAACA CGTTTACCGA GCAAGTTTG ACGGAAGCGT CCTTGTTTAC	9420
CTTTAAGCAT GTGGCTCAAT GATTTCATG GACGGCTACC TGGTCCTGTG ATTGGACGAC	9480
CACGACGACC ATTGTCAATC AAAGCGTCAA CTGCTTCTTG AAGCATACGC TTCTCATTTT	9540
GAACGATGAT ACCTGGTGCA TTAACTCAA GCAAACGAGC CAAACGGTTG TTACGGTTGA	9600
TAACACGGCG GTAAAGGTCA TTCAAGTCAG ATGAGGCAA ACGGCCACCA TCCAAGTGCA	9660
ACATTGGACG AAGATCTGGT GGGATAACCG GAAGGATGTT AAGAATCATC CATTCAGGTT	9720
TGTTTCCAGA CTTGTAAAAG GCATCCAAAA CATCCAAACG ACGGATGGCT TTGACACGCT	9780
TTTGTCCAGT AGCTGTTTTT AATTCTTCTT TGAGTTCAGC AATTCTTTT TCAAGATCTA	9840
CTTGCTTCAA AAGGTCTTGG ATGGCTTCCG CACCCATCTT GGCAACAAAT GAACCATAAC	9900
CATATTCACG CAAGCGCTCT CGGTATTTCG GCTCTGTCAT GATAGACTTG TGCTCAAGTG	9960
GTGTATCCTT AGGATCAATC ACCACATAAG CCGCAAAGTA GATAACTTCC TCGAGGGCAC	10020
GAGGGCTCAT ATCAAGGGTC AAGCCATAC GGCTTGGAAT CCCCTTGAAG TACCAGATGT	10080
GAGATACAGG AGCTTTCAAT TCGATATGTC CCATACGCTC ACGACGAACT TTCGTACGCG	10140
TTACTTCAAC CCCACAGCGG TCACAAACAA TTCCTCTGTA ACGAATGCGT TTGTACTTAC	10200
CACAAGCACA TTCCAGTCT TTTGTAGGAC CAAAGATCAC TTCATCAAAG AGTCCTTCAC	10260
GTCTGCTTT CAAGGTACGA TAATTGATTG TTTCAGGTTT TTTGACTTCT CCATAAGACC	10320
ATGAACGGAC TTTACTTGGA GAAGCTAGGG TGATTTGCAT ACTTTTAAAA CGATTACAT	10380

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CAACCACTAT	TTCTTCCCTT	TCTATTCTAA	GTGAACTGCT	TATTCTTGTT	CAGCAGCTTC	10440
TTCTGTGCT	TCGCTTTTG	TTGCTTTCTC	AGCTTCTTCA	GCTTCAAAGG	CTGCTTTAGC	10500
CTCTTGGGCT	GCTTTTTCGC	GGGCTTTTTC	AAGGTCATCT	ACGTGGATGA	CATCTTCGTC	10560
CATTCCCTCA	TCCAAGTCGC	GAAGTTCCAC	TTCTTGGTCA	TCTTCGTCTA	GGACACGCAT	10620
GTCAAGACCA	AGAGATTGCA	ATTCTTTGAC	AAGAACTCGG	AAGGATTCTG	GAACACCTGG	10680
TTTGTGAATT	GGTTTGCCTT	TTGTAATAGC	TTCATAGGCT	TTCAAACGTC	CGTTGATATC	10740
GTCCGACTTG	TAAGTCAAGA	TTTCTTGAAG	GACATTTGAC	GCACCGTAGG	CTTCAAGAGC	10800
CCAAACCTCC	ATCTCACC GA	AACGTTGTCC	ACCAAACCTGA	GCCTTACCTC	CGAGTGGTTG	10860
TTGGGTAACA	GTGAGTATG	GTCCGACTGA	ACGCGCGTGC	AATTTATCAT	CAACCATGTG	10920
GTGGAGTTTG	ATCATGTACA	TGACTCCGAC	AGAAACACGG	TTATCAAACG	GTTCACCAGT	10980
ACGTCCATCG	TAAAGGATCG	TTTGGGCATC	GCTATCCATA	CCTGCTTCTT	TAACAGTTGA	11040
CCAAAGATCT	TCAGAACTTG	CTCCATCAAA	GACTGGTGTA	GCGATGTGAA	TACCAAGAGT	11100
ACGAGCTGCC	ATACCAAGGT	GAAGCTCCAT	AACCTGACCG	ATATTCATAC	GTGATGGTAC	11160
CCCAAGTGGG	TTCAACATGA	TGTCGACTGG	AGTTCCGTCT	GGAAGGTAAG	GCATGTCTTC	11220
TACAGGAACG	ATACGAGAGA	CAACCCCTTT	GTTTCCGTGA	CGTCCGGCCA	TTTTATCTCC	11280
GACCTTAATC	TTACGTTTTT	GAGCGATGTA	AACACGAACC	AACATGTTAA	CACCTGATTG	11340
CAACTCATCT	CCATTTACAC	GTGTAAAGAT	CTTAACATCA	CGAACGACAC	CATCGGCACC	11400
GTGTGGTACA	CGAAGAGAAG	TATCACGCAC	TTACAGAGAC	TTGTCTCCAA	AGATAGCGTG	11460
CAAGAGACGT	TCTTCAGCTG	AAAGATCTTT	CTCACCCCTA	GGTGTACTTT	TACCTACAAG	11520
AATATCACCT	TCTTTAACCT	CAGCACCAAT	ACGGATAATC	CCCATTTCGT	CAAGGTCTTT	11580
GAGGGCATCT	TCACCAACGT	TTGGAATTTT	GCGAGTGATT	TCTTCAGGCC	CAAGCTTTGT	11640
ATCGCGCGTT	TCTGATTCGT	ATTCTTCAAG	GTGAACAGAT	GTGTAGACAT	CGTCCTTCAC	11700
CAAGCGTTCG	CTCATGATAA	CGGCATCCTC	GAAGTTGTAA	CCTTCCCAAG	TCATGTAGGC	11760
AACGATTGGG	TTTTGTCCAA	GCGCCATTTT	TCCATTTTCC	ATAGAAGGTC	CGTCAGCGAT	11820
GAAATCGCCT	TTTTCAACGA	CATCACCAAC	TTTTACGAGA	GTGCGTTGGT	TGTAAGCAGT	11880
ACCTGAGTTT	GAACGACGGA	ATTTTTGGAT	GTGGTAAACA	TCCAATGAAC	CATCTTCACG	11940
ACGAACTTCT	ACCTTGTCAG	CATCTGCGTA	AGTAACTTTA	CCATCATACT	GAGCAATCAC	12000
AGCCGCACCA	GAATCGTGGG	CTGCTTGGTA	TTCCATACCA	GTACCAACGT	AAGGTGCCTG	12060
AGGATTAATC	AATGGCACAG	CCTGACGTTG	CATATTGGCT	CCCATGAGGG	CACGGTTGGA	12120
GTCATCGTTT	TCCAAGAAAG	GAATACATGC	TGTCGCAACG	GCAACTACCT	GTTTTGGTGA	12180

AACGTCCATG TAGTCAACAA TATTAGCTGG ATACTCTTGG TTGACCCCTT GGTGACGTCC	12240
CATGACAATC TTCTCAGCAA AGGTTCATC TTCATTGAGA CGAGAGTTAG CCTGAGCTAC	12300
AGTATATTCA TCTTCTTCAT CAGCTGTCAA CCAAACAATT TCGTTCGTGA CAACACCTGT	12360
TTACACGGTCA ACCTTACGGT ATGGTGTTTG AACAAAACCA TATTTGTTCA AGTGTCATA	12420
AGATGACAAG TTATTGATCA AACCGATGTT AGGTCCTTCA GGTGTCTCGA TTGGACACAT	12480
ACGACCATAG TGAGTGTAGT GCACGTCACG TACTTCATAT CCAGCACGGT CACGAGTCAA	12540
ACCACCAGGT CCTAAGGCTG ACAAACGGCG TTTGTGAGAC AACTCAGAAA GCGGGTTGTG	12600
TTGGTCCATG AACTGTGACA ACTGTGATGA ACCAAAGAAT TCTTTAACTG CAGCTGTTAC	12660
AGGACGGATA TTGATAATTT GTTGTGGTGT CAAGACTTCA TTGTCCTGAA CAGACATACG	12720
TTACACGGACA TTACGTTCCTA TACGAGAAAG TCCCAAACGT ACTTGGTTGG CAAGCAATTC	12780
ACCAACCGCA CGGATACGAC GATTTCCAAG GTGGTCGATA TCACTACAC GGCCAAGTCC	12840
TTGAGCCAAG TTGAGGAAGT AGCTCATCTC AGCAAGGATA TCTGCAGGAG TCACCGTACG	12900
AACCTTGTC TCTGGGTTAG CATTACCAAT GATCGTTACG ACGCGATCTG GATCAGTTGG	12960
AGCAATAACC TTGAATTTTT GAAGAACAAC AGGCTCAGTC ACAACGGCTG CATCGTTTGG	13020
GATGTAGACA ATCTTGTTCA AGTCGCCATC CAAATGGCTT TCAATGCTTT CAATCACGCT	13080
ACGAGTCATA ATCGTACCAG CTTCTACCAA GATTTCTCCA GTTTCAGGGT CTACCAATGG	13140
CTCTGCAATG GTTTGGTTGA GCAAACGTGT TTTAACATTG AGTTTTTTAT TGATTTTGTA	13200
ACGACCAACT GCTGCCAAGT CATAACGACG TGGGTCAAAG AAGCGAGCTA CAAGCAAGCT	13260
ACGTGAGCTT TCAGCCGTCT TAGGCTCACC TGGACGAAGG CGTTCGTAAA TTTCTTTCAA	13320
GGCTTCGTCT GTACGAGAGT CCATTGGATT CTTGTGGATA TCTTTTCAA CAGTGTTGCG	13380
AACCAATTCG CTGTCACCAA AGATATCAAA GATTTTCATCA TCACCTGAGA AACCAAGAGC	13440
ACGAACCAAG GTTGTAATG GAATCTTACG AGTACGGTCG ATACGAGTGT AGGTGATATC	13500
TTTGTAGTCG CTTTCAAGTT CCAACCAAGC TCCACGGTTA GGGATAACAG TTGAACCATA	13560
GCCACCTTA CCATTTTGT CTAATTTGTC GTTAAAGTAA ACACCTGGTG AGCGGACCAA	13620
CTGAGAAACG ATAATACGTT CACCACCAT TATGATGAAA GTACCCATTT CTGTCATGAT	13680
TGGGAAATCA CCAAAGAAAA CTTCTGGGT CTTGATTTTCG CTTGTTTCTT TATTGATCAA	13740
ACGGAAGGTT AAAAAATTG GTGCTGAGTA GCTAGCATCG TGGATACGAG CTTCTTCTAG	13800
CGTATATTTT GGTTCCTTGA TTTCATATCC AACAAATTC AACTCCATTG TGTCTGTGAA	13860
GTTTGAAATT GGCAATACAT CTTCAAACAC TTCTTAAGA CCGTGGTCTA GGAAAGCTTT	13920

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GAATGAGTCA	GTTTGAATTT	CAATCAAATT	TGGTAAGTCA	AGAACTTCTT	TGATTCTTGA	13980
AAAACCTACGA	CGGGTACGAT	GTTTCCCGTA	TTGAACGTCA	TGTCCTGCCA	AGATGATTCT	14040
CCTTTGTAAA	TAAGTTCCAA	GCCTTGTCAA	TCAGGCTTTT	CTAATCGTCA	TATGGTTGTA	14100
AACCCCTTAT	CACCGTGTCC	TCTTGACGAA	TTTTCAGAAT	CTTTAAGCCT	CTGTTACAAA	14160
TGCTCAAAAT	CTTGAAAAA	AGCACAAAA	GAGCAGCTAA	ATCTGACTTT	TTCAGAAGAT	14220
TTAACTGCTG	TGAGCCTTGT	CTGGACAATA	TTTCAGACAA	AACCTACGAC	AAATGATTAC	14280
CCATATTATA	CCCTATTTAG	CTAGATTTTT	CAAGGGGTTT	CAGTAGGTTT	TTGGTAAATT	14340
TTTTCCCAT	GAAAACCTGG	CATCACATTC	GAATCACGCT	ATGGTACAAA	AAACTGAAAA	14400
AACTATTGAC	TGAAAATCAT	TTTCAAGGTA	TAATAATAAA	CGTTAAGGCG	GTATAGCCAA	14460
GTGGTAAGGC	ACGGCTCTGC	AAAAGCTTGA	TCGTCGGTTC	AAATCCGTCT	ACCGCCTTCT	14520
ATAACTTGAT	TTATCAGGTT	TCAAATGAAC	AGAAAGCCCA	ATTTGAAGGG	CTTTTTTTAT	14580
TTTCCCTCGA	ATAAATACGT	ATAACTTTAA	AAACTTTTGG	AGCGAGTTTG	TGGCAGAGTT	14640
CTTTCCATGG	CATAATTCCC	TTTTGAAATC	AG			14672

(2) INFORMATION FOR SEQ ID NO: 112:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 7902 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 112:

AGGAGACTAT	TCAAGCCCAA	ATTgAGTAGC	CCAGCAAAGA	CTGTATAGAC	TGTGATACGT	60
TTTTTCATAGC	CATTGGTAAA	GAGAATTTGG	GAACCAAGAA	TGGTATCTAA	GGCCAGGATA	120
ATCGTACGAA	AAGCGAAGAG	AGAGGTCAAG	ATGCCGCCTC	CGATATATTT	TTCACFACCG	180
TAAAGTAGGA	TGGCATTGTTG	TCCTAAAACC	ATGAGTCCAA	AACTCAGTGG	AATGATAAAG	240
AAGTTAAAGA	TTCGACTACC	TCTATTAACC	AGAGAAACAT	AGGCTTCTTT	GTCTCCTTTC	300
CCCAGATAGT	AACTGAGACG	AGGCACACTC	ACTCCAATTG	CACCTGTTAC	AACCCAGCT	360
ATAACGGTCA	CAATTCGCTG	AGCTATGGTA	TAGTAACTAA	CGTTGACATC	AATCCCTGTT	420
TTAACGAGGA	AGAGGCGATC	TAAAAAAGTG	AAGAGCATAT	TGGCATTGGC	AAAGACTAAC	480
ATGGCTGTCA	GAGGGAGAAA	GAGTGGTTTA	AAATCACTTA	GGTGAATTTT	AACAAGTTTG	540
ATGTCTCTTT	TAATCCAAAA	ATAACTAATC	AGGTAGTTAA	TCAGCGTCGA	TAAACTCATC	600
ACAAGTGTAT	AGACAACAAT	ATCGTGTTCA	TTTTTAACAA	ATAAGAAAAT	AGAGACCAGC	660

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ATCAGGATAC	GGATGAAGGC	AGTTTTGTAA	AAGAGAAAAC	TGTAATTTTC	CAGAGCTTCA	720
TTGACCCATT	CGATTGAAAA	AATCTGGGCA	ATGAGTTGAA	TCCCCATAAC	AAGGTAGACC	780
TTTTTGACGA	TTGGATTATC	AGTAAAGAAG	AGAGGATAGG	CTAGGATATA	GACAGCAGTG	840
GTCAAAATCG	TACAAGCGAT	GCACAAATAA	AAAAGACTAG	AAAAGGTTCT	GTTAAGATCT	900
TTTTTGTTAT	CCTTGACATT	ACTGATAGCC	CTTAAACCGT	AGTTATAGAC	ACCATAAGTT	960
GCAAAGGGCA	AGAAAAATGA	CAAAATAGTG	TCGACTGAGT	TGAAGTAACC	ATAGTCAGTT	1020
CGGTCCAAGA	CACGCGCGAC	ATAGGTTCCA	GTTAGGATGG	GAAAAATAAT	ATTCAAGACA	1080
CGAATTCCCA	TGTAAGATAG	AGCATTTAAT	TTTATACTTT	TCATTCAATT	TACCTCGTTT	1140
TTCATTATAT	CATAAAGTTA	GCTAATAAGA	AATGAAGGGC	AGTAAGTCAA	GTAATCACTT	1200
TGAAGTTTCA	AATCTTAAGT	TTTAAGTTTT	CTTTAAGGAA	AGTATATTAT	TCTGAAGGAC	1260
TCTAAAATTT	CGCAGCCATT	TATTAGTAAT	TGCTACAGAA	TTCCTAGTCA	TTACTAGAAA	1320
TGGACTAGTT	TCTTTGAATA	ATAGAACTGC	ATAATTCTCC	TATTCTAGAA	GGGGAGGACC	1380
AGTATTTCCT	TTATGATAGG	ACTAGATTGT	GGTATAATAG	AGAGAATAAG	TTTTTTTAGT	1440
AAGACAAAGG	AGAAAATAGA	TGATTTATGC	AGGAATTCTT	GCCGGTGGAA	CTGGCACACG	1500
CATGGGGATC	AGTAACTTGC	CAAAACAATT	TTTAGAGCTA	GGTGATCGAC	CTATTTTGAT	1560
TCATACAATT	GAAAAATTTG	TCTTGGAGCC	AAGTATTGAA	AAAATTGTAG	TTGGTGTTCA	1620
TGGAGACTGG	GTTTCTCATG	CAGAAGATCT	TGTAGATAAA	TATCTTCCTC	TTTATAAGGA	1680
ACGTATCATC	ATTACAAAGG	GTGGTGCTGA	CCGCAATACA	AGTATTAAAG	ACATCATTTGA	1740
AGCCATTGAT	GCTTATCGTC	CGCTTACTCC	AGAGGATATC	GTTGTTACCC	ACGATTCTGT	1800
TCGTCCATTT	ATTACACTTC	GCATGATTCA	GGACAATATC	CAACTTGCCC	AAAATCATGA	1860
CGCAGTGGAC	ACAGTGGTAG	AAGCGGTTGA	TACTATCGTT	GAAAGTACCA	ATGGTCAATT	1920
TATTACAGAT	ATTCCAAATC	GTGCTCACCT	TTATCAAGGA	CAAACACCTC	AAACATTCCG	1980
TTGCAAGGAC	TTCATGGACC	TTTATGGATC	TCTTTCTGAT	GAAGAGAAGG	AAATCTTGAC	2040
AGATGCATGT	AAAATCTTTG	TGATCAAAGG	AAAAGATGTG	GCTTTGGCCA	AAGGTGAATA	2100
CTCAAATCTG	AAGATTACAA	CCGTAACAGA	TTTGAAGATT	GCAAAAAGTA	TGATTGAGAA	2160
AGACTAGTAA	AATGATTAAT	CAAATTTATC	AACTAACTAA	GCCTAAGTTT	ATCAATGTCA	2220
AATATCAGGA	AGAGGCTATT	GACCAAGAGA	ATCATATCCT	TATCCGTCCC	AACTACATGG	2280
CTGTCTGTCA	TGCGGATCAG	CGTTACTATC	AGGGAAAACG	TGATCCCAAG	ATTTTGAATA	2340
AAAAGCTTCC	AATGGCAATG	ATTCACGAGT	CATGTGGAAC	CGTCATTCT	GACCCGACCG	2400

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GAACCTACGA	GGTTGGTCAA	AAAGTTGTCA	TGATTCCCAA	TCAGTCTCCT	ATGCAGAGTG	2460
ATGAAGAATT	CTATGAAAAC	TACATGACAG	GGACCCATTT	CTTGTCTAGT	GGATTTGATG	2520
GCTTTATGAG	AGAGTTTGTT	TCTCTCCCTA	AAGATCGTGT	GGTGGCTTAT	GATGCTATTG	2580
AAGATACGGT	TGCAGCCATT	ACAGAGTTTG	TCAGTGTGGG	CATGCACGCT	ATGAATCGTC	2640
TATTGACTCT	TGCTCATAGC	AAGCGGGAGC	GGATCGCCGT	TATTGGAGAT	GGAAGTTTAG	2700
CTTTTGTGGT	TGCCAATATT	ATCAACTATA	CTTTGCCAGA	AGCAGAGATT	GTGGTTATTG	2760
GTCGTCATTG	GGAAAAGTTG	GAACTCTTCT	CATTTGCCAA	AGAATGCTAT	ATTACGGATA	2820
ATATTCCTGA	AGATTTGGCC	TTTGACCATG	CTTTTGAATG	TTGTGGTGGT	GATGGTACTG	2880
GACCAGCTAT	TAATGACTTG	ATTCGCTACA	TTCGTCCTCA	GGGAACGATT	CTCATGATGG	2940
GAGTTAGCGA	ATATAAAGTC	AATCTCAATA	CTCGCGATGC	CTTAGAAAAG	GGCTTGATTT	3000
TGGTTGGGTC	ATCTCGTTCT	GGTCGCATTG	ATTTTGAAAA	TGCTATCCAA	ATGATGGAAG	3060
TCAAGAAATT	TGCCAATCGT	CTTAAAAATA	TCCTTTATCT	AGAAGAACCT	GTAAGAGAAA	3120
TTAAAGATAT	TCATCGTGTC	TTTGCAACCG	ATTTAAACAC	AGCCTTTAAA	ACAGTGTTTA	3180
AGTGGGAAGT	ATAAGTACTG	GAGGTTAATT	GTGGAGAAAA	TCATTAAAGA	AAAAATTTCT	3240
TCCTTACTTA	GTCAAGAAGA	GGAAGTCCTC	AGTGTGAAC	AACTGGGTGG	AATGACCAAT	3300
CAAAACTATT	TGGCCAAAAC	AACAAATAAG	CAATACATTG	TTAAATTCCT	TGGTAAAGGG	3360
ACAGAAAAGC	TTATCAATCG	ACAAGATGAA	AAGTACAATC	TTGAACTACT	AAAGGATTTA	3420
GGCTTAGATG	TAAAAAATTA	TCTTTTGTAT	ATTGAAGCTG	GTATCAAAGT	AAATGAGTAT	3480
ATCGAATCTG	CGATTACGCT	TGATTCAACG	TCAATCAAGA	CCAAGTTCGA	CAAAATTACT	3540
CCAATATTAC	AAACTATTCA	TACGTCTGCT	AAGGAATTAA	GAGGAGAATT	TGCTCCTTTT	3600
GAAGAAATCA	AAAAATACGA	ATCCTTGATT	GAAGAACAAA	TTCCTTATGC	CAACTATGAA	3660
TCTGTTAGAA	ATGCAGTCTT	CTCCTTAGAG	AAAAGACTGG	CTGACTTAGG	TGTTGACAGA	3720
AAATCTTGTC	ATATCGATTT	GGTGCCTGAA	AACCTTATCG	AATCACCTCA	AGGACGACTT	3780
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TTTTTAGAGT	CTGAATTCAC	TTCCCAAGAG	GAAGAAACTT	TCTTATCTCA	CTATGAGAGT	3900
GACCAAACAC	CGGTTTCTCA	TGAAAAGATT	GCTATTTATA	AAATTTTACA	AGATACTATT	3960
TGGAGTCTAT	GGACTGTCTA	TAAGGAAGAG	CAAGGTGAAG	ATTTTGGTGA	CTATGGTGTG	4020
AATCGTTACC	AAAGAGCTAT	TAAAGGTTTG	GCTTCTTATG	GAGGTTCAGA	TGAAAAGTAA	4080
AAACGGAGTT	CCTTTTGGCC	TTCTCTCAGG	TATTTTCTGG	GGCTTGGGTC	TAACGGTTAG	4140
TGCTTATATC	TTTTCGATTT	TTACAGATTT	GTCACCCTTT	GTGGTGGCTG	CAACTCATGA	4200



TTTTTTGAGC ATCTTTATCT TACTAGCTTT TCTCTTGGTA AAAGAAGGGA AAGTTCGCCT	4260
CTCAATTTTC TTAAATATTC GCAATGTCAG TGTATCATC GGAGCCTTGC TAGCAGGCCC	4320
TATCGGTATG CAGGCCAATC TTTATGCAGT TAAGTATATC GGAAGTTCTT TAGCTTCATC	4380
TGTATCGGCT ATTTACCCTG CGATTTTCAGT TCTATTGGCT TTCTTCTTTT TGAAGCACAA	4440
GATTTGCAAA AATACTGTAT TTGGGATTGT CTTGATTATT GGAGGGATTA TTGCTCAGAC	4500
CTATAAGGTT GAACAGGTTA ATTCTTTCTA CATTGGGATT CTTTGTGCTT TGGTTTGTGC	4560
TATTGCATGG GGAAGTGAGA GTGTTCTTAG CTCTTTTGCC ATGGAAAGTG AATTGAGTGA	4620
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CTTCTCTCAT CAGTCATTTA CTGCAGTAGC CAATGGACAA TTGCTAGGTC TCATGATTGT	4740
TTTTGCAGCC TTTGATATGA TTTCCCTACTT GGCTTATTAT ATCGCTATCA ATCGCTTGCA	4800
ACCAGCCAAG GCTACAGGCT TGAACGTGAG CTATGTAGTA TGGACGGTCT TGTTCGAGT	4860
TGTTTTCTTG GGTGCACCGC TAGATATGCT GACCATTATG ACGTCACTTG TCGTCATTGC	4920
TGGAGTTTAT ATTATTATTA AAGAATAAAG GAGATTCGTG TGAAAGCCAT TATCTTAGCA	4980
GCGGGATTGG GAACTCGCTT GCGTCCTATG ACTGAAAATA CCCCTAAAGC CTTGGTTCAG	5040
GTTAATCAAA AACCTTTGAT TGAGTACCAA ATTGAGTTTC TCAAAGAAAA AGGAATCAAT	5100
GACATCATCA TCATTGTTGG TTATCTTAAA GAACAATTTCG ATTACTTGAA AGAGAAATAC	5160
GGTGTCGTC TCGTTTTCAA TGATAAATAC GCTGACTACA ATAACTTTTA CTCTCTCTAT	5220
CTTGTA AAAAG AGAATTGGC CAACAGCTAT GTTATTGATG CTGACAATTA TCTCTTTAAA	5280
AATATGTTCC GCAATGATTT GACACGTTTCG ACTTATTTTA GTGTTTATCG TGAAGATTGT	5340
ACCAACGAAT GGTTCCTGGT TTATGGAGAT GACTACAAGG TTCAAGACAT TATTGTTGAT	5400
AGCAAGGCAG GTCGCATCCT TAGTGGTGTA TCCTTCTGGG ATGCTCCAAC TGCAGAAAAG	5460
ATTGTCAGCT TTATCGACAA GGCTTATGTA AGTGGTGAAT TTGTTGATCT CTATTGGGAC	5520
AATATGGTTA AGGATAATAT CAAAGAGCTA GATGTCTATG TTGAAGAATT AGAAGGCAAT	5580
AGCATTTATG AGATCGATAG TGTCCAAGAC TATCGTAAAT TAGAAGAAAT TCTTAAAAAC	5640
GAAAATTAAA GATTCCAACA TCTGACAAAA TAGTCGGATG TTTTGTGATT TTTTACGAAC	5700
TTTTACGAAT AGATAGATGA GTAGAAAAAG AAATGGAGTT ATTTATGAAA ATCACA AACT	5760
ATGAAATCTA TAAGTTAAAA AAATCAGGTT TGACCAATCA ACAGATTTTG AAAGTGCTAG	5820
AATACGGTGA AAATGTTGAT CAGGAGCTTT TGTGGGTGA TATTGCAGAT ATCTCAGGTT	5880
GCCGTAATCC AGCCGTTTTT ATGGAACGTT ATTTTCAGAT AGACGATGCG CATTTGTCTGA	5940

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AAGAGTTTCA	AAAATTCCCA	TCTTTCTCTA	TTTTAGATGA	CTGTTATCCT	TGGGATTTGA	6000
GTGAAATATA	TGATGCGCCT	GTACTTTTAT	TTTACAAGGG	AAATCTTGAC	CTCCTGAAAT	6060
TCCCGAAGGT	AGCGGTCGTG	GGCAGTCGTG	CTTGTAAGCA	ACAGGGAGCT	AAGTCAGTTG	6120
AAAAAGTCAT	TCAAGGCTTG	GAAAATGAAC	TGGTTATTGT	CAGTGGTCTG	GCCAAGGGCA	6180
TTGACACAGC	AGCTCATATG	GCAGCTCTTC	AGAATGGCGG	AAAAACCATT	GCAGTGATTG	6240
GAACAGGACT	GGATGTGTTT	TATCCTAAAG	CCAATAAACG	CTTGCAAGAC	TACATCGGCA	6300
ATGACCATCT	GGTCTAAGT	GAATATGGAC	CTGGTGAACA	ACCTCTGAAA	TTTCATTTTC	6360
CTGCCCCTAA	TCGCATCATT	GCTGGACTTT	GTCGTGGTGT	GATTGTAGCA	GAGGCTAAGA	6420
TGCGTTCAGG	TAGTCTCATT	ACGTGTGAGC	GAGCAATGGA	AGAAGGACGC	GATGTCTTTG	6480
CTATTCCTGG	TAGCATTTTA	GATGGACTAT	CAGACGGTTG	CCATCATTTG	ATTCAAGAAG	6540
GAGCAAAATT	GGTCACCAGT	GGGCAAGATG	TTCTTGCGGA	ATTTGAATTT	TAAAAATGAC	6600
CTAAGCTAGA	ATTCTAAGAA	AAAATCAATT	TTAAGAGAAA	ATGAACCCAA	CATTTCCATA	6660
ATAAAACGCA	TATTAGCAAG	TTTTTAACAC	TTGATAATAT	GCGTTTTTTC	TAAGTGGAAT	6720
AGTAGAGTAG	AGGATTTTTC	TCATATAATA	CTCTTCGAAA	ATCTCTTCAA	ACTACGTCAG	6780
CTTCCATCTG	CAACCTCAAA	ACAGTATTTT	GAGCgaCTtC	GTCAGTCTTA	TCTACAACCT	6840
CAAAGCAGTG	CTTTGAGCAA	CCTGTGGCTA	GCTTCCTAGT	TTGCGCTTTG	ATTTTCATTG	6900
AGTATAAGGG	AAAGTATAGT	GAATTGAAAT	AAGATGTGAA	CAACTCTATC	AGGAAAGTCA	6960
AATTAATTTA	TAGAAATATT	TTAGCAGCCA	AGGTGTACTG	TTATAGATTC	AATTACACTA	7020
TAATTTAGTG	TAATTGAGAA	AGGAGAAATG	ATTGTGATTG	ATGTTGGCTA	GGTTATGTTT	7080
AATGATTTCCT	ACCGTCTCAA	ATCTTGTCAG	TAAGGAAAAA	TAAATTCTTC	AAAAGTAGAG	7140
ATTACAAGGC	TTGTTTAAGA	AAGAATTCAA	AGACCTTGAC	AAATAAAAAT	AAAATGGTTA	7200
TTATAAAAAA	TGGTCTGAAA	TAGATGATGA	TACTTTTCGA	AAATCTCTTC	AAATACGTCA	7260
GCTCAGCTTT	GCCTTGCTGT	GTTTTGAGCA	AGCTACGGTT	AGCTTCCGAG	TTTGATTTTC	7320
ATTTACTAGA	AATGAAACTG	ATGAGAGATA	TCAGTAGACA	TTTGAGTCAG	GATATTATGG	7380
AAAATGATAA	AAAGAGCTCG	TGAGATTGGC	ATATCAGACT	ACTAAAGTAT	TGAGTTTGTT	7440
AGGATTTTAG	CGACTAGTTA	GCTGGGAAAG	GAAGATATTT	GTGACAAATA	ATAAACTGTA	7500
TTTCGTTGATA	GAATTTAGAA	ATAAAATATA	TGAAGAATTA	GAACCTTTCCA	GAAGTGATTT	7560
AGCGATTTTA	CTATGTGCCA	TGCTTATCGC	CTCTATCGGA	TTAAATATGG	ATTCGACTCC	7620
CGTGATTATT	GGAGCCATGT	TAATCTCTCC	TTTGATGACA	CCTATTCTGG	GAGTGGGGCT	7680
CTCTCTAGCT	ATATTTGATT	TTAAATTGTT	AAGAAAATCT	TTTAAAATAT	TAGCTATTCA	7740

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AATTCTTGCC AGTCTAATAG CTTCAACACT TTATTTTAT CTTTCTCCCA TTTCGTATGC	7800
TAGTTCGGAG ATTGTTGCTA GAACCTCTCC GACTATTTGG GATGTTCTCA TTGCTTTTGT	7860
AGGAGGGATA GCAGGTATCA TTGGTGCTAG GAAAAAAGAG AC	7902

(2) INFORMATION FOR SEQ ID NO: 113:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 18627 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 113:

GAAGTTGAAA TGGCCAGCTG ATGAGCAATA TCGGTCATAG AAATCTTCTC AATCAACTTT	60
TGCGCAATTT TTTGGTGAT AATACGAGGA ATTTGGTGAT TTTTCTTGAC GATAGAAGTT	120
TCAGCGACCA TCATTTTGA ACAGTGATAG CACTTGAAAC GACGCTTCT AAGTAGAATT	180
CTAGTAGGCA TACCAGTTGT CTCAAGGTAA GGAATCTTAG ACGGTTTTG AAAGTCATAT	240
TTCTTCAATT GGTTCGCCA CTCAGGGCAA GATGGGCGT CGTAGTCCAG TTTGGCGATG	300
ATTTCTTGT GTGTATCTT ATTGATGATG TCTAAATCT GGATATTAGG GTCTTTAATG	360
TCTAGTAATT TTGTGATAA ATGTAATTGT TCCATATGAA TCTTTCTAAT GAGTTGTTG	420
GTCGCTTTT ATTATAGGTC ATATGGGACT TTTTCTTCTAC AATAAAATAG GCTCCATAAT	480
ATCTATAAGG GATTTACCCA CTACAAATAT TATAGAGCCA AAAATCCTTT GTTTACTAAA	540
CAAGGGATTT TTCTTTTGTC TCTGCTCCTT TTTTGATATA ATAGTTCTAT GTTAAATCA	600
GAAAAACAAT CACGTTATCA AATGTTAAAT GAAGAATTGT CCTTCCTATT GGAAGGCGAA	660
ACCAATGTTT TGGCTAATCT TTCCAACGCC AGTGCTCTCA TAAATCACG TTTTCCTAAT	720
ACCGTATTTG CAGGCTTTTA TTTGTTCGAT GGAAAGGAAT TGGTTTTAGG CCCCTTCCAA	780
GGAGGTGTTT CCTGCATCCG TATTGCACTA GGCAAGGGTG TTTGTGGTGA GGCAGCTCAC	840
TTTCAGGAAA CTGTATTGT TGGAGATGTG ACGACCTATC TCAACTATAT TTCTTGATG	900
AGTCTAGCTA AAAGTGAAAT TGTGGTGCCG ATGATGAAGA ATGGTCAGTT ACTTGGAGTT	960
CTGGATCTGG ATTCTCAGA GATTGAGGAT TACGATGCTA TGGATCGAGA TTATTTGGAA	1020
CAATTTGTCG CTATTTTGCT TGAAAAGACA GCATGGGACT TTACGATGTT TGAGGAAAAA	1080
TCTTAATGTA TCAAGCACTT TATCGAAAAT ATAGAAGTCA AAATCTCTCC CAGTTAGTTG	1140
GTCAAGAAGT TGTGGCTAAG ACTCTTAAAC AAGCGGTGGA GCAAGAGAAA ATAAGTCACG	1200

820

CTTATCTTTT TTCTGGTCCT CGTGGAACGG GAAAAACCAG TGTTGCTAAA ATCTTTGCCA	1260
AGGCTATGAA CTGTCCCAAT CAAGTGGGTG GCGAACCTTG CAATAACTGC TATATTTGTC	1320
AAGCAGTGAC GGACGGTAGT TTAGAAGATG TCATTGAAAT GGATGCAGCT TCTAATAATG	1380
GGGTAGATGA AATTCGCGAA ATTCTGTATA AATCTACCTA TGCGCCTAGC CTTGCTCGTT	1440
ATAAGGTTTA TATCATAGAT GAGGTTTACA TGCTGTCTAC AGGGGCTTTT AATGCCCTCC	1500
TAAAGACGCT GGAAGAACCA ACACAGAATG TAGTCTTTAT TTTGGCCACT ACTGAATTGC	1560
ACAAGATTCC TGCTACTATT CTATCCCGTG TGCAACGTTT TGAGTTTAAA TCAATTAGA	1620
CACAGGATAT TAAGGAACAT ATTCATAATA TCTTAGAAAA AGAAAATATC AGTTCTGAAC	1680
CAGAGCTGT GGAATCATT GCCAGACGGG CGGAAGGTGG AATGCGGGAC GCCTTGCTTA	1740
TTTTGGATCA AGCCCTGAGT TTGACACAGG GAAATGAGCT GACGACTGCT ATCTCTGAAG	1800
AAATTACTGG CACCATTAGC CTATCAGCCT TGGATGATTA TGTGGCGGCC TTGTCTCAAC	1860
AGGATGTTCC CAAAGCTTTG TCTTGCTTGA ATCTTCTTTT TGACAATGGT AAGAGCATGA	1920
CTCGTTTGT GACCGATCTT TTGCACTATT TAAGAGACTT GTTAATTGTT CAAACAGGGG	1980
GAGCAAATAC TCATCATAGT TCAGTCTTTG TAGAAAATTT GGCAC'TTCCT CAAAAAATC	2040
TGTTTGAAAT GATTGCTTA GCAACAGTGA GTTTAGCAGA TATTAAGTCT AGTTTGCAAC	2100
CCAAGATTTA TGCTGAAATG ATGACCGTCC GTTTGGCGGA AATCAAGTCC GAACCAGCTC	2160
TATCAGGAGC GGTGAAAAT GAAATGCTA CGCTGAGACA GGAAGTGCC CGTCTCAAAC	2220
AAGAGCTTTC TAATGTAGGT GCGGTTCCCTA AACAAGTTGC ACCAGCTCCT AGTCGACCAG	2280
CTACGGGCAA AACAGTCTAT CGTGTCGATC GCAATAAAGT GCAATCTATC TTACAAGAGG	2340
CCGTCGAAAA TCCTGATTTA GCACGTCAA ATTTAATTCTG TTTGCAGAAT GCCTGGGGAG	2400
AGGTAATTGA AAGCTAGGT GGGCCGGACA AGGCTCTGCT AGTTGGTTCT CAACCGGTTG	2460
CTGCCAATGA ACACCATGCT ATTCTTGCTT TTGAGTCTAA CTTCAATGCT GGTCAAACCTA	2520
TGAAACGAGA CAATCTCAAT ACCATGTTTG GTAATATCCT CAGTCAGGCG GCAGGTTTTT	2580
CACCTGAGAT TTTAGCTATT TCCATGGAGG AATGGAAAGA AGTTCGCGCA GCCTTTTCAG	2640
CCAAAGCCAA ATCTTCTCAA ACTGAAAAAG AAGTAGAAGA AAGCCTGATT CCAGAAGGAT	2700
TTGAATTTTT GGCTGATAAA GTGAAGGTAG AGGAAGACTA AAGAAAGATT TCATGATACA	2760
ATAAGTTTAT GAATAAACAA CAATTATTA TTATGGCGCT GTTTACAGCT GCTGAGACCT	2820
ATTTTTTCAA TGAAGCCTGG ATGACTGGCC GCTATATTAT GGCAGCCTTT TGGGCAATTT	2880
TACTCTTAG AAATTCCGA GTCAGTTATG TGATGGGCAA AATCGTTGAT GTCATCGATC	2940
AGCATTTTAA TAGGAAAGAC TAGCCCTCAG CTTCCAGACA AAATCAAAGC CTTTtaggct	3000

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TTTTTTTGTT	ATACTAGAAA	AGTATATTTA	TAGAATTTTT	GCTCTATTTC	TGGGGAAATC	3060
AGACGTTTTT	CTAGTAAGTA	CTGTAAAAGT	TTTGAAAAAG	AAAGGAACTA	TCATGTCAGT	3120
ATTAGAGATC	AAAGATCTTC	ACGTTGAGAT	TGAAGGAAAA	GAAATTTTAA	AAGGGGTTAA	3180
CCTGACCCTG	AAAACAGGAG	AAATTGCCGC	TATCATGGGA	CCAAATGGTA	CAGGTAAATC	3240
GACTCTTTCT	GCCGCTATCA	TGGGAAATCC	AAACTATGAA	GTAACATAAG	GTGAAGTTTT	3300
GTTTGATGGC	GTAAACATCC	TTGAGTTGGA	AGTGGATGAG	CGTGCGCGTA	TGGGACTTTT	3360
CCTTGCTATG	CAATACCCAT	CAGAAATCCC	TGGAATTACC	AATGCTGAGT	TTCTTCGTGC	3420
CGCTATGAAT	GCGGGTAAAG	AAGATGATGA	GAAGATTTCA	GTTCGTGAGT	TTATTACTAA	3480
GCTAGATGAA	AAAATGGAAT	TGCTCAACAT	GAAAGAAGAA	ATGGCAGAGC	GTTACCTCAA	3540
CGAAGGCTTC	TCTGGTGGTG	AGAAAAACG	CAATGAAATT	CTTCAACTTT	TGATGTTGGA	3600
GCCAACATTT	GCTCTTTTGG	ACGAGATTGA	CTCAGGTCTT	GATATTGACG	CTCTTAAAGT	3660
TGTGTCTAAA	GGTGTCAATG	CCATGCGTGG	TGAAGGTTTT	GGTGCTATGA	TCATCACTCA	3720
CTACCAACGT	CTTTTGAAGT	ATATCACACC	TGATGTGGTA	CACGTGATGA	TGGAAGGTCG	3780
TGTTGTCCTT	TCTGGTGGTC	CAGAATTGGC	TGCGCGTTTG	GAACGTGAAG	GATACGCAAA	3840
ATTAGCTGAA	GAACCTGGCT	ACGACTACAA	GGAAGAATTG	TAATTCCTTC	GTATCTTTTA	3900
GGAGAAGTAA	ATGACTAGAG	AAAATATTAA	ACTTTTTTCA	GAAATGCACG	CTGAACCAAG	3960
CTGGTTGGCT	GATCTCCGTC	AAAAAGCTTT	TGACAAGATT	GAGACTTTGG	AATTACCAGT	4020
TATTGAGTGT	GTCAAATTCC	ACCGTTGGAA	TCTGGGTGAT	GGAACGATTA	CAGAAAATGA	4080
GCCATCAGCA	AATGTTCCAG	ATTTACAGC	TTTAGATCAT	CACTTGAAGT	TGGTGCAAGT	4140
AGGAACTCAA	ACTGTTTTCG	AACAACTCC	AGTTGAGTTA	GCTGAACAGG	GTGTTGTCTT	4200
CACAGACTTT	CACTCAGCTT	TAGAAGAAAT	TCCAGAGCTG	ATCGAAGAAAT	TCTTCATGTC	4260
ATCTGTTAAG	TATGATGATG	ACAAGTTGGC	GGCTTACCAC	ACAGCTTACT	TTAACAGTGG	4320
TGCTGTACTC	TATATTCCAG	ATAACGTAGA	AATCACAGAG	CCAATTGAAG	GAATTTTCTA	4380
CCAAGATAGC	GATAGCAATG	TGCCGTTTAA	CAAGCATATT	ATGATTATCG	TTGGTAAAAA	4440
TTCTAAGATT	AGTTATCTGG	AGCGTTTAGA	GTCACGCGGT	GAAGGAAGTG	ACAAAGCAAC	4500
TGCCAATATC	ACAGTGGAAG	TGATTGCACG	TTCTGGTGCG	CAAGTCAAGT	TTGCTGCTAT	4560
CGACCGTCTA	GGTGAAAACG	TCACTGCCTA	CATTAGCCGT	CGTGGTAAAT	TAGGCAACGA	4620
TGCAAGTATT	GACTGGGCTA	TCGGTGTCAT	GAACGAAGGA	AATGTCGTTG	CTGATTTTGA	4680
TAGTGACTTG	ATTGGTAATG	GTAGCCATGC	TGACCTCAAG	GTTGTAGCTC	TTTCAAGTGG	4740

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TCGTCAGGTA	CAAGGGATTG	ATACTCGTGT	AACTAACTAT	GGCTGCAACT	CAATCGGAAA	4800
CATTCTACAA	CATGGGGTTA	TCCTTGAAAA	AGCAACTTTG	ACTTTCAATG	GTATCGGCCA	4860
CATCATCAAG	GGTGCTAAGG	GAGCAGATGC	GCAACAAGAG	AGCCGTGTTC	TCATGCTTTC	4920
AGACCAAGCG	CGTTCAGATG	CTAACCCAAT	TCTTTTGATT	GATGAAAATG	ACGTAACTGC	4980
AGGCCATGCA	GCCTCTATTG	GTCAGGTAGA	TCCAGAAGAT	ATGTACTACC	TCATGAGTCG	5040
TGGCTTGGAT	AAGGCAACTG	CAGAGCGTTT	GGTTGTTCGT	GGTTTCCTTG	GATCTGTTAT	5100
CGTGGAGATT	CCAGTCAAGG	AAGTTCGTGA	TGAAATGATT	GCAACTATCG	AAGAGAAATT	5160
GTCAAAACGC	TAAGGGGCAG	CCTATGTTAG	ATGTAGAAGC	GATTTCGCAAG	GATTTTCCAA	5220
TTTTAGATCA	GATTGTCAAT	GATGAACCTC	TGCTCTATCT	GGACAATGCT	GCGACGACAC	5280
AAAAACCACT	AGTAGTTCTG	AAAGCTATTA	ACAGCTACTA	TGAGCAGGAC	AATGCCAATG	5340
TTCACCGTGG	TGTCCATACC	TTAGCGGAAC	GAGCGACAGC	TTCTTATGAA	GCTGCTCGTG	5400
AAACCATTCTG	TAAGTTTATT	AATGCAGGCT	CTACAAAGGA	AGTTCCTCTT	ACCAGAGGAA	5460
CGACAACCAG	CCTTAACTGG	GTGGCACGCT	TTGCTGAGGA	AATTCTCACT	GAGGGAGACC	5520
AGGTCCTTGAT	TTCACTAATG	GAACACCATT	CTAATATCAT	TCCATGGCAG	GAAGCTTGTC	5580
GAAAGACTGG	AGCAGAGCTT	GTCTATGTCT	ATCTTAAAGA	CGGTGCCTTG	GATATGGAGG	5640
ATTTGCGAGC	TAAATTGACT	GATAAGGTTA	AATTTGTTTC	CCTAGCTCAT	GCCTCCAATG	5700
TTCTTGGTGT	GGTCAATCCG	ATCAAGGAAA	TCACTCAATT	AGCCACCAA	GTGGGGCAA	5760
TTATGGTAGT	GGATGGTGCT	CAATCTACAC	CTCATATGAA	GATTGATGTC	CAGGACTTGG	5820
ATCTGGACTT	TTTCGCCTTT	TCGGGTCACA	AGATGGCTGG	TCCGACTGGT	ATCGGTGTCC	5880
TTTACGGCAA	AGAAAAGTAT	CTTGAGCAAA	TGTCTCCAGT	AGAATTTGGC	GGCGAGATGA	5940
TTGATTTTGT	CTACGAGCAA	TTTGCTAGTT	GGAAGGAATT	GCCTTGGAAG	TTTGAGGCTG	6000
GAACGCCAAA	TATGGCAGGA	GCTATTGGAC	TTGCGACTGC	AGTTGATTAT	CTGGAAAAGA	6060
TTGGTATGGA	TGCCGTTGAA	GCTCATGAAC	AGGAATTGAT	TGCGTACGTC	TATCCAAAAC	6120
TGCAGGCAAT	TGAGGGATTG	ACCATTTACG	GTTCTCAGGA	TTTGGCTCAA	CGTTCGGGTG	6180
TTATTGCCTT	TAACCTAGGT	GATCTCCATC	CTCACGATCT	TGCGACGGCT	CTGGATTATG	6240
AAGGAGTGGC	TGTTCTGTGCT	GGTCACCATT	GTGCGCAACC	CTTGCTTCAG	TATTTGGAAG	6300
TCCCAGCAAC	AGCTCGTGCA	AGTTTTTATA	TCTACAATAC	CAAGGCAGAT	TGCGACAAAC	6360
TAGTCGATGC	CCTACAAAAG	ACAAAGGAGT	TTTTCAATGG	CACTTTCTAA	ACTAGATAGC	6420
CTTTATATGG	CAGTGGTAGC	AGACCATTCTG	AAAAATCCAC	ATCACCAGG	GAAGTTAGAA	6480
GATGCTGAGC	AAATCAGTCT	CAACAATCCG	ACTTGTGGGG	ATGTCATCAA	CCTCTCTGTC	6540

AAGTTTGATG CAGAGGACCG TTTGGAAGAT ATTGCTTTTC TAAATTCAGG ATGCACGATT	6600
TCAACTGCTT CTGCTAGTAT GATGACAGAT GCCGTTTTAG GAAAAACCAA ACAAGAAATT	6660
TTAGAACTGG CGACTATTTT TTCTGAAATG GTTCAAGGGC AAAAAGATGA GCGTCAAGAC	6720
CAACTTGGAG ACGCGGCATT CTTGTCAGGT GTTGCCAAAT TCCCTCAAAG AATCAAGTGT	6780
GCAACCCTAG CTTGGAATGC CCTTAAGAAA ACAATTGAAA ATCAAGAAAA ACAGTAAGAC	6840
AAGTTTCTTT TGTCTTATGA ATTATTAGAA ATGAAGAAAG AAAGGATACT ATGGCTGAAG	6900
AAAGAGTAGA ACCAAAACCA ATTGACCTTG GTGAATATAA ATTTGGTTTC CATGACGATG	6960
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CTGCTAAGGG TGAGCCTGAG TGGATGTTGG AGTTCGTTT GAAGTCTTAT GAAACCTTCA	7080
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TCTACTACCA AAAACCATCT GACAAACCAG CCCGTTCTTG GGATGATGTA CCTGAAAAGA	7200
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CTTCTGCCCA GTACGAGTCA GAAGTGGTTT ACCACAACAT GAAGGAAGAG TTCCAAAAAT	7320
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TATGGTCGGG TGGAACTTT ATCTACGTGC CAAAAGGTGT CAAGGTAGAT ATTCCACTTC	7500
AACTTATTT CCGTATCAAT AACGAAAATA TAGGTCAGTT CGAACGTACC TTGATTATCG	7560
TTGATGAGGG AGCAAGCGTC TACTACGTAG AAGGATGTAC AGCACCAACA TATTCAAGCA	7620
ATAGCTTACA CGCTGCCATT GTAGAAATTT TTGCTTTGGA CGGAGCTTAT ATGCGTTATA	7680
CAACTATCCA AAACGGTCT GATAACGTCT ATAACCTGGT AACAAAGCGT GCTAAGGCTC	7740
AAAAGGATGC CACTGTTGAG TGGATTGATG GAAACTTGGG TGCCAAAACG ACTATGAAAT	7800
ATCCATCTGT TTACCTTGAT GGAGAAGGAG CGCGTGGTAC CATGCTCTCT ATCGCCTTTG	7860
CTAATGCAGG GCAACACCAA GACACGGGTG CTAAGATGAT TCACAATGCT CCACATACCA	7920
GCTCGTCTAT TGTGTCTAAA TCCATCGCTA AAGGTGGAGG AAAGGTTGAC TACCGTGGAC	7980
AAGTCACCTT TAACAAGAAC TCTAAGAAAT CTGTTTCCCA CATTGAATGT GATACCATTA	8040
TCATGGATGA CTTGTCAGCA TCAGATACTA TTCCATTTAA TGAAATTCAC AACTCGCAAG	8100
TGGCTTTGGA ACACGAAGCC AAAGTATCTA AGATTTGAGA AGAGCAATTG TATTATCTCA	8160
TGAGCCGTGG ATTGTCAGAA TCTGAGGCAA CTGAAATGAT TGTCATGGGA TTTGTAGAAC	8220
CCTTTACAAA AGAACTTCCA ATGGAATACG CAGTTGAGCT GAACCGCTTG ATTAGCTATG	8280

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AAATGGAGGG ATCAGTTGGA TAAAATTTGA TTTTATACTC TTCGAAAATC TCTTCAAACC	8340
ACGTCAGCAT CGCCTTACCG TATGTATGGT TwCTGAtTCG TCAGTTTCAT CTACAACCTC	8400
AAAACAGTGT TTTGAGCAAC tGCGGCTAGC TTCCTAGTTT GTTCTTTGAT TTTGAGTATT	8460
AGATTTACTC AAAATCAAGG ATTTTGAAGA TGAAGTTGTA TCAAAAAATC GCGGTTTAAA	8520
ATCGCGATTT TTTATAATTT CTCGTTAACA AAGCGGACAA ACTGATTCCA CCAAACTTTT	8580
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AAATCTTTTT CTGAGCCAGC AATTTCTCA GCTAGGGCAA TAGCGGCGCT GTTGGCACTA	9420
GATACCAGAG TTGCTTCAAG CAACTCTTCG ACAGTATAAT TACGGGCCTC CATAGGAATA	9480
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GAGAGGGTAA TACTTCCGTT TTCCAAAGCT TCATAGACCA GATAAACAGT AATCAATTTT	9600
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GAAAAATATGG TAAAATAAAG TAAGGGAGGT AACTCATGTT TCGTAGAAAT AAATTATTTT	9900
TTTGGACCAC AGAAATTTTA CTCTTAACCA TCATCTTTTA CCTATGGAGA CAGATGGGGT	9960
CCTTGATTAA CCCTTTTGTT AGCGTGCTTA ATACAATTAT GATTCCATTT TTATTAGGGG	10020
GCTTTTTTTA TTATTTGACA AACCCATATG TTACTTTCTT AAATAAAGTC TGTAACACTCA	10080



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ATCGTTTGCT	TGGTATTTTA	ATTACCTTGT	GTACTTTGGT	CTGGGGAATG	GTCATAGGTG	10140
TTGTCTATCT	CTTACCTATT	TTGATTAATC	AGTTATCTAG	TTTGATTATA	TCTAGTCAAA	10200
CTATTTATAG	TCGAGTACAA	GACTTAATCA	TAGACTTATC	TAATTATCCT	GCGCTCCAGA	10260
ATTTGGATGT	AGAAGCTACA	ATTCAGCAGT	TAAACTTATC	CTATGTTGAT	ATTCTTCAAA	10320
ATATCCTAAA	TAGCGTATCA	AATAGTGTGG	GGAGCGTCTT	GTCAGCTCTT	ATCAGTACTG	10380
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TCTTGCCCAT	GCTTGAAAGA	ACGATTCTAA	AGAGGGATCG	CTTGCATATT	GCAGGCTTAT	10500
TAAAGAATTT	AAATGCGACG	ATTGCTCGCT	ATATTAGTGG	AGTTTCGATT	GACGCAATCA	10560
TTATAGGTTG	TTTGGCTTAT	ATTGGCTATA	GTATTATTGG	TTTAAAATAT	GCTTTAGTTT	10620
TTGCCATTTT	TCTCGGTGTA	GCCAATTAA	TTCCCTTATGT	GGGGCCAAGT	ATTGGTTTGA	10680
TTCCATGAT	CATCGCAAAT	ATATTCAGT	ATCCCCATAG	ACTGCTGATT	GCAGTGATTT	10740
ATATGCTTGT	TGTTTCAGCAG	GATAGTGCA	ATATCTTATA	TCCTCGAATC	GATAGGAAGTG	10800
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GTGTAGTTGG	AATGATTGTC	GCAGTGCCAA	CCTATTCTAT	CTTGAAAGAA	ATTTCTAAGT	10920
TCTTATCCCA	TTTGTATGAA	AATCATAAAA	TAATGAAAGA	ACGAGAAAGA	GAATTAGCTA	10980
AGTAAAAGTC	AGGAGAACCC	TGATTTTTCT	TTACTGGAAG	TGGCCTTTAG	ATTAGAAGAC	11040
TGAAAATAAG	TTAAAGTCTT	AAACTAATTT	TCACAGCTAA	GAATAGTAGA	AGTTAATCTG	11100
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ATGTGATTTT	TTTTTGCAAT	TTTGAGTTAG	ATAAGGTATA	ATGATTTTAT	TGTCTTTTGG	11520
GGTCGTTACG	GATTCGACAG	GCATTATGAG	GCATATTTTG	CGACTCGTGT	GGCGACGTAA	11580
ACGCTCAGTT	AAATATAACT	GCAAAAAATA	ACACTTCTTA	CGCTCTAGCT	GCCTAAAAAC	11640
CAGCAGGCGT	GACCCGATTT	GGATTGCTCG	TGTTCAATGA	CAGGTCTTAT	TATTAGCGAG	11700
ATACGATTAA	GCCTTGCTTA	GCGGTTTGAT	AAGAGATTGA	TAGACTCGCA	GTTTCTAGAC	11760
TTGAGTTATG	TGTCGAGGGG	CTGTTAAAAAT	AATACATAAC	CTATGGTTGT	AGACAAATAT	11820

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GTTGGCAGGT	GTTTGGACGT	GGGTTCGACT	CCCACCGGCT	CCATTATTCC	TTTGCATTCT	11880
TTTGCATTCC	TTGGTAAAAC	GTGTGTTAAAT	CAACGTTTTT	TATTTTTATC	TTTGGTATTC	11940
CTTTGCATTC	TTTTGCTAAA	AAGGGAGTCA	CAAACAGACC	CTATTTTAAA	AAAGGATAGA	12000
AAAAAGGATA	CAACATTTGT	CGCATCCTAA	AAATAATCTT	TTTTCGACGG	AAGACATGGG	12060
ATTTCGAACCC	ACGCACGCTA	TTACACGCCT	ACCGCGTTTC	CAACACGGCC	TCTTAAGCCT	12120
CTTGAGTAAT	CTTCCAATAC	TTACTCAAAT	AGTCTACCAT	AAAGGCTCTT	ATCTTGCAAT	12180
AAAAATTCTA	GAAATAAGAA	AAATGATAGA	TTTTGAAAGA	AAATGATAAA	AAATGCTTGA	12240
CTTCGAAAGA	AAGTATGATA	GAATGAATAG	TGTAAACGAT	AACAGGAGGT	GATTCAGTGT	12300
TAAAAACAGA	ACGTAAACAA	CTAATTTTAG	AGGAGTTAAA	TCAACATCAT	GTAGTTTCTC	12360
TAGAAAAATT	AGTTAGTTTG	CTAGAAACGT	CAGAATCAAC	GGTTCGAAGA	GACTTGGATG	12420
AGTTGGAAGC	GGAAAACAAG	CTTCGTCGTG	TGCATGGTGG	AGCAGAACTC	CCCTACTCCT	12480
TACAGGAAGA	AGAAACCATT	CAAGAAAAAT	CTGTCAAAAA	CCTTCAAGAA	AAGAAATTGC	12540
TGGCTCAGAA	AGCAGCCTCT	CTCATTAAG	AAAAAGATGT	CATCTTTATC	GATGCTGGAA	12600
CAACAACTGC	TTTTTTGATT	CATGAATTGG	TCAATAAGAA	TGTTACAGTT	GTGACCAACT	12660
CCATTCACCA	TGCCGCTCAG	TTGGTTGAAA	AGCAGAwTCC	AACTGTCTATG	GTTGGAGGAA	12720
ACGTCAAGAC	GGCGACAGAT	GCTAGTATCG	GGGGCGTTGC	TCTTAACCAG	ATTAACCAAT	12780
TGCACTTTGA	CCGTGCCTTT	ATCGGAATAA	ATGGTGTGTA	CGATGGCTAT	TATACGACTC	12840
CTGATATGGA	GGAGGGAGCT	GTGAAAAGAG	CTATTTTGGA	GAATGCCAAG	CAGACCTACG	12900
TCTTGGTGGA	TTCGTCAAAA	ATTGGACAAA	CTTGCTTTGC	CAAGGTAGCC	CCACTCAAAC	12960
GCGCTATCGT	TATCACTAGT	CAAGGGCATG	AGCTCTTGCA	GGTTATTAAG	GAGAAAACGG	13020
AGGTAATAGA	AGTATGATTT	ATACAGTCAC	ACTCAATCCA	TCCATTGACT	ATATCGTTTCG	13080
TTTGGACCAA	GTCAAAGTTG	GTAGTGTCAA	TCGTATGGAC	AGTGATGATA	AGTTTGCTGG	13140
TGGGAAAGGA	ATCAATGTCA	GCCGTGTCTT	GAAACGTTTG	AATATACCAA	ATACAGCGAC	13200
GGGATTTATC	GGTGGCTTTA	CTGGTAAATT	TATCACAGAT	ACTTTAGCAG	AGGAAGAAAT	13260
CGAGACACGT	TTTGTCCAGG	TGGCAGAAGA	TACTCGTATC	AATGTTAAAA	TCAAAGCAGA	13320
CCAAGAAACA	GAAATCAACG	GAACGGGTCC	AACTGTTGAA	TCGGTTCAGC	TAGAAGAATT	13380
GAAAGCTATT	TTATCTAGTC	TGACAGCAGA	AGATACAGTT	GTCTTTGCAG	GTTCAAGTGC	13440
TAAAAATCTA	GGCAATGTTA	TCTATAAGGA	TTTGATTTCC	TTGACGCGCC	AGACTGGTGC	13500
GCAAGTGGTC	TGTGACTTTG	AAGGACAGAC	CTTAATTGAT	AGTTTGGACT	ACCAGCCTCT	13560
TCTTGTAATA	CCAAACAATC	ATGAACCTGG	AGCGATTTTT	GGGGTTAAAC	TCGAAAGTTT	13620

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AGATGAAATT	GAGAAATACG	CTCGTGAGTT	ACTGGCTAAG	GGTGCTCAAA	ATGTTATTAT	13680
CTCTATGGCT	GGTGATGGTG	CCCTTCTTGT	CACATCTGAG	GGAGCTTACT	TCGCTAAACC	13740
AATCAAAGGA	ACAGTCAAAA	ATTCAGTTGG	AGCTGGTGAT	TCTATGGTTG	CTGGATTACAC	13800
AGGTGAATTT	GTCAAATCAA	AAGACGTAGT	AGAAGCCTTC	AAATGGGGAG	TGGCTTGCGG	13860
AACGGCAACT	ACCTTCTCAG	ATGACTTGGC	AACGGCGGAA	TTTATTAAAG	AAACATATGG	13920
AAAAGTTGAG	GTAGAAAAAC	GATGAAAATT	CAAGACCTAT	TGAGAAAAGA	TGTCATGTTG	13980
CTAGATTTCG	AGGCAACTGA	AAAAACAGCT	GTCATCGACG	AGATGATTAA	AAATTTGACA	14040
GACCACGGTT	ATGTAACAGA	TTTGTAAACA	TTTAAAGAAG	GAATTTTGCC	GCGTGAAGCT	14100
TTGACTTCTA	CTGGTTTGGG	TGATGGAATC	GCAATGCCTC	ACAGCAAAAA	CGCTGCTGTC	14160
AAAGAAGCGA	CAGTTCCTAT	TGCTAAGTCA	AATAAGGGTG	TTGACTACGA	GAGCTTGGAT	14220
GGACAAGCAA	CTGACCTCTT	CTTCATGATT	GCAGCTCCAG	AAGGTGCCAA	TGATACTCAC	14280
TTGGCAGCCT	TGGCAGAATT	GTCTCAATAC	TTGATGAAAG	ACGGTTTTCG	AGACAAACTT	14340
CGTCAAGCAA	CATCTGCAGA	CCAAGTTATC	GAACCTTTTG	ACCAAGCTTC	AGAAAAAACT	14400
GAGGAACTTG	TTCAAGCACC	TGCTAATGAC	TCTGGTGACT	TTATCGTAGC	TGTTACAGCT	14460
TGTACAACAG	GTATTGCCCA	CACCTTACATG	GCCCAAGAAG	CCCTTCAAAA	AGTAGCTGCT	14520
GAAATGGGGG	TTGGTATCAA	GGTCGAAACC	AACGGTGCTA	GCGGTGTTGG	AAATCAACTA	14580
ACTGCAGAAG	ATATCCGTAA	GGCTAAAGCT	ATTATCATTG	CAGCAGACAA	GGCCGTTGAA	14640
ATGGATCGAT	TTGATGGAAG	ACCATTGATC	AATCGTCCAG	TTGCTGACGG	TATCCGTAAG	14700
ACAGAAGAGC	TAATTAACCT	GGCTCTTTCA	GGAGATACTG	AAGTCTACCG	TGCCGCTAAT	14760
GGTGCCAAAG	CTGCAACAGC	CTCTAACGAA	AAACAAAGCC	TTGGTGCTGC	CTTGTAACAAA	14820
CACCTTGATGA	GTGGTGTATC	TCAAATGTTA	CCATTTCGTTA	TCGGTGCTGG	TATCATGATT	14880
GCCCTTGCCCT	TCTTGATTGA	CGGTGCTTTG	GGTGTTCCTA	ATGAAAACCT	TGGCAATCTT	14940
GGTTCCTTACC	ATGAGTTAGC	TTCTATGTTT	ATGAAAATTG	GTGGAGCTGC	CTTTGGTTTG	15000
ATGCTTCCAG	TCTTTGCGGG	TTATGTTGCC	TACTCTATTG	CTGAAAAACC	GGGTTTGTA	15060
GCAGGTTTCG	TGGCTGGTGC	TATTGCCAAA	GAAGGTTTTC	CCTTTGGTAA	AATTCCTTAT	15120
GCCGCAGGTG	GTGAAGCAAC	TTCAACTCTT	GCAGGTGTCT	CATCTGGTTT	CCTAGGTGCC	15180
CTTGTTGGTG	GATTTATCGC	AGGTGCCTTG	GTTCTTGCCA	TCAAGAAATA	CGTTAAAGTT	15240
CCTCGTTCAC	TCGAAGGTGC	TAAATCAATC	CTTCTATTGC	CACTTCTTGG	AACAATCTTG	15300
ACAGGATTTG	TTATGCTAGC	TGTGAATATC	CCAATGGCTG	CAATCAACAC	TGCTATGAAT	15360

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GACTTCCTAG	GCGGTCTTGG	AGGAGGTTCA	GCTGTCCTTC	TTGGTATCGT	CCTTGGTGGA	15420
ATGATGGCTG	TTGACATGGG	TGGACCAGTT	AATAAAGCAG	CTTATGTCCT	TGGTACAGGT	15480
ACGCTTGCGAG	CAACTGTTC	TTCAGGTGGT	TCTGTAGCCA	TGGCAGCAGT	TATGGCTGGA	15540
GGAATGGTGC	CACCACCTGC	AATCTTTGTC	GCAACTCTTC	TTTTCAAAGA	TAAATTTACT	15600
AAGGAAGAAC	GTAACCTCTGG	TTTGACAAAC	ATCATCATGG	GCTTGTCATT	TATCACTGAG	15660
GGAGCGATTC	CATTTGGTGC	CGCTGACCCA	GCTCGTGCGA	TTCCAAGCTT	CATCCTTGGT	15720
TCAGCAGTAG	CAGGTGGACT	CGTTGGTCTT	ACTGGTATCA	AACTCATGGC	GCCACACGGA	15780
GGAATCTTCG	TTATCGCCCT	TACTTCAAAT	GCTCTCCTTT	ACCTCGTTTC	TGTCTTGGTA	15840
GGAGCAATCG	TAAGTGGTGT	GGTTTATGGT	TACCTACGCA	AACCACAAGC	ATAAAAAATA	15900
GAAAAATGAA	AAGATTGGAC	CGTTTGGTGC	AGTCTTTTTC	TCTTCCCGAA	ATGCCTGTGA	15960
AATATGGTAT	AATAGAAGAA	TGGCAAACAA	GAATACAAGT	ACAACAAGAC	GGAGACCGTC	16020
TAAAGCAGAA	CTGGAAAGAA	AAGAAGCGAT	TCAACGAATG	TTGATTTCGT	TAGGAATTGC	16080
GATTTTATTG	ATTTTCGCAG	CCTTCAAATT	AGGGGCTGCA	GGTATAACCC	TTTATAATTT	16140
AATTCGCTTG	CTAGTGGGTA	GCCTAGCTTA	TCTGGCGATA	TCGGCCCTAT	TAATCTATCT	16200
CTTCTTTTTC	AAGTGGATAC	GAAAACAGGA	AGGACTCTTA	TCTGGCTTTT	TCACCATATT	16260
TGCTGGCTTA	CTCTTGATTT	TTGAGGCCCTA	CTTGGTTTGG	AAATATGGTT	TGGACAAGTC	16320
CGTTCTAAAA	GGGACCATGG	CTCAGGTTGT	GACAGATCTG	ACTGGTTTTC	GAACGACTAG	16380
CTTTGCTGGA	GGGGGCTTGA	TCGGGGTCGC	TCTTTATATT	CCAACAGCCT	TTCTCTTTTC	16440
AAATATCGGA	ACTTACTTTA	TTGGTTCTAT	CTTGATTTTA	GTGGGTTCTC	TCCTAGTCAG	16500
CCCTTGGTCT	GTTTACGATA	TTGCTGAATT	TTTCAGTAGA	GGCTTTGCCA	AATGGTGGGA	16560
AGGGCACGAG	CGTCGAAAAG	AGGAACGCTT	TGTCAAACAA	GAAGAAAAAG	CTCGCCAAAA	16620
GGCTGAGAAA	GAGGCTAGAT	TAGAACAAGA	AGAGACTGAA	AAAGCCTTAC	TCGATTTGCC	16680
TCCTGTTGAT	ATGGAAACGG	GTGAAATTCT	GACAGAGGAA	GCTGTTCAAA	ATCTTCCACC	16740
TATTCCAGAA	GAAAAGTGGG	TGGAACCAGA	AATCATCCTG	CCTCAAGCTG	AACTTAAATT	16800
CCCTGAACAG	GAAGATGACT	CAGATGACGA	AGATGTTTCA	GTCGATTTTT	CAGCCAAAGA	16860
AGCCCTTGAA	TACAAACTTC	CAAGCTTACA	ACTCTTTGCA	CCAGATAAAC	CAAAAGATCA	16920
GTCTAAAGAG	AAGAAAATTG	TCAGAGAAAA	TATCAAAATC	TTAGAAGCAA	CCTTTGCTAG	16980
CTTTGGTATT	AAGGTAACAG	TTGAACGGGC	CGAAATTGGG	CCATCAGTGA	CCAAGTATGA	17040
AGTCAAGCCG	GCTGTGGTG	TAAGGGTCAA	CCGCATTTCC	AATCTATCAG	ATGACCTCGC	17100
TCTAGCCTTG	GCTGCCAAAG	ATGTCCGGAT	TGAAGCACCA	ATCCCTGGGA	AATCCCTAAT	17160

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CGGAATTGAA GTGCCCAACT CCGATATTGC CACTGTATCT TTCCGAGAAC TATGGGAACA	17220
ATCGCAAACG AAAGCAGAAA ATTTCTTGGA AATTCCTTTA GGAAGGCTG TTAATGGAAC	17280
CGCAAGAGCT TTTGACCTTT CTAAATGCC CCACTTGCTA GTTGCAAGTT CAACGGGTTT	17340
AGGGAAGTCA GTAGCAGTTA ACGGCATTAT TGCTAGCATT CTCATGAAGG CGAGACCAGA	17400
TCAAGTTAAA TTTATGATGG TCGATCCCAA GATGGTTGAG TTATCTGTTT ACAATGATAT	17460
TCCCCACCTC TTGATTCCAG TCGTGACCAA TCCACGCAA GCCAGCAAGG CTCTGCAAAA	17520
GGTTGTGGAT GAAATGGAAA ACCGTTATGA ACTCTTTGCC AAGGTGGGAG TTCGGAATAT	17580
TGCAGGTTTT AATGCCAAGG TAGAAGAGTT CAATTCCCAG TCTGAGTACA AGCAAATTCC	17640
GCTACCATTG ATGTGCTGA TTGTGGATGA GTTGGCTGAC CTCATGATGG TGGCCAGCAA	17700
GGAAGTGGA GATGCTATCA TCCGTCTTGG GCAGAAGGCG CGTGCTGCAG GTATCCACAT	17760
GATTCTTGCA ACTCAGCGTC CATCTGTTGA TGTCTCTCTT GGTGTGATTA AGGCCAATGT	17820
TCCATCTCGT GTAGCATTTG CGGTTTCATC AGGAACAGAC TCCCGTACGA TTTTGGATGA	17880
AAATGGAGCA GAAAACTTC TTGGTCGAGG AGACATGCTC TTAAACCAG TTGATGAAAA	17940
TCATCCAGTT CGTCTCCAAG GCTCCTTTAT CTCGGATGAC GATGTTGAGC GCATTGTGAA	18000
CTTCATCAAG ACTCAGGCAG ATGCAGACTA CGATGAGAGT TTTGATCCAG GTGAGGTTTC	18060
TGAAAATGAA GGAGAATTTT CGGATGGAGA TGCTGGTGGT GATCCGCTTT TTGAAGAAGC	18120
TAAGTCTTTG GTTATCGAAA CACAGAAAGC CAGTGCCTCT ATGATTTCAGC GTCGTTTATC	18180
AGTTGGATTT AACCGTGCGA CCCGTCTCAT GGAAGAACTG GAGATAGCAG GTGTCATCGG	18240
TCCAGCTGAA GGTACCAAAC CTCGAAAAGT GTTACAACAA TAAAAAATA GCTTCTTTCC	18300
AAGTTTGAG GGAAGCTATT TTAGTGGCTA TTGATTGCTT TTATTTTCTG AAGTTGGCGC	18360
ATTGGACTGT TTTTCGTTTT CAGTAGCAGG TTTACTTGAA GCAGGAGTAG AAGAGTCCTG	18420
AGTTGCTGTT TTCTGATCTT CTTTTTCTC TTCCTTGACG CTAGATTTTG GTGTTTCCTC	18480
TGCTGTGTT TTTTCTTGAC TAGTGTTAGT CTCTTTAGTT GGAAGTGTGT TTTCTTTAGG	18540
GGATTCCTTT TGGATTTCTT TGACAATGGT TGTCGTCTGG CTGTCTGTAG GTTCTTTTTT	18600
AATATTTTGG TTATTATCCA AGGCGTT	18627

(2) INFORMATION FOR SEQ ID NO: 114:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 2560 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 114:

TAAAATACGT TACCTTGCTT CTGCACGTTT AGCAGGTAAG TCATTGAAAT TTAAAGATCA	60
AGATATTACA ATTGAAGAAA CGACTGAAAC AGCTTTTGAA GGAGTTGATA TTGCTCTCTT	120
TTCAGCAGGT AGTTCTACAT CAGCTAAGTA TGCACCATAC GCAGTAAAAG CTGGCGTGGT	180
AGTAGTAGAT AATACATCTT ATTTCCGTCA AAATCCAGAT GTTCCTTTGG TTGTTCCAGA	240
GGTCAATGCT CATGCACTTG ATGCTCACAA CGGAATCATT GCCTGCCCTA ATTGTTCAAC	300
AATTCAAATG ATGGTGGCTC TTGAGCCGGT TCGCCAAAAA TGGGGCTTGG ACCGTATCAT	360
TGTTTCAACT TATCAAGCCG TTTCAGGTGC TGGTATGGGA GCAATTCTTG AGACACAACG	420
TGAACTTCGT GAAGTCTTGA ATGATGGTGT GAAACCACGT GATTTGCATG CGGAAATCTT	480
GCCTTCAGGT GGTGACAAGA AACATTATCC TATCGCCTTT AACGCTCTTC CACAAATTGA	540
TGTTTCACT GATAATGATT ACACGTACGA AGAGATGAAG ATGACCAAGG AAACCTAAGAA	600
AATTATGGAA GATGATAGCA TTGCAGTATC TGCAACATGT GTGCGTATTC CAGTCTTGTC	660
AGCTCACTCT GAGTCTGTTT ATATCGAAAC AAAAGAAGTG GCTCCAATCG AAGAAGTAAA	720
AGCAGCTATC GCAGCCTTCC CAGGTGCTGT TCTTGAAGAT GATGTAGCTC ATCAAATCTA	780
TCCTCAAGCT ATCAATGCAG TTGGTTCGCG TGATACCTTT GTTGGTCGTA TCCGTAAAGA	840
CTTGATGCA GAAAAAGGAA TTCACATGTG GGTGTTTCA GATAACCTTC TCAAAGGTGC	900
TGCTTGAAC TCAGTTCAGA TTGCTGAAAC TCTTCATGAA CGTGGATTGG TTCGTCCAAC	960
AGCCGAATTG AAATTTGAAT TAAAATAGTC ATATCGTTTA GGAGTTCAGA TGAATCCTT	1020
CTTTGAAATA GAGAGGTGTT TTCGTGTCTT ATCAAGATTT AAAAAATGT AAAATCATTA	1080
CAGCCTTTAT TACCCCTTC CATGAGGATG GTTCCATTAA CTTTGATGCT ATTCCAGCCT	1140
TGATTGAGCA TTTATTGGCC CATCATACGG ATGGAATTC TCTCGCAGGA ACGACTGCTG	1200
AGAGTCCAAC TTTGACCCAC GATGAGGAGT TGGAGTTGTT TCGGCTGTA CAAAAGGTTG	1260
TCAATGGACG CGTTCCTTTG ATTGCGGGTG TAGGTACTAA TGATACGCGT GACTCTATTG	1320
AGTTTGTCAA AGAAGTAGCG GAATTTGGTG GTTTCGCAGC TGGGCTTGCT ATTGTTCCCTT	1380
ACTACAACAA ACCTTCTCAA GAAGGATGT ATCAGCACTT TAAGACTATT GCAGATGCTT	1440
CTGACCTACC AATTATTATC TATAACATTC CAGGGCGTGT AGTTGTCGAA TTGACTCCAG	1500
AAACCATGCT TCGCTTGGCT GACCATCCAA ATATTATCGG TGTCAAAGAA TGTACTAGCT	1560
TGGCTAATAT GGCTTACTTG ATTGAGCACA AGCCTGAAGA GTTCTTGATT TATACAGGTG	1620
AGGATGGAGA TGCTTTCCAT GCCATGAACC TTGGGCGGGA TGGGGTTATT TCTGTTGCCT	1680

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CTCATACAAA TGGGGATGAA ATGCACGAGA TGTTTACTGC GATTGCAGAA AGCGATATGA	1740
AGAAAGCCGC AGCAATTCAG CGTAAATTCA TTCCTAAGGT TAATGCTCTC TTCTCTTATC	1800
CAAGTCCTGC TCCAGTTAAG GCAATTCTTA ACTATATGGG ATTTGAAGCT GGACCCACTC	1860
GTCTACCTCT TGTTCAGCA CCAGAAGAAG ATGCCAAACG CATTATCAAG GTTGTCGTAG	1920
ATGGCGACTA CGAAGCAACT AAGGCAACTG TAACAGGGGT CTTAAGACCA GATTACTAAT	1980
AAAGACAATA AAATCCGGCT CTTTGTCAAC TGAGTGGGT TGAAGTCAGC TAAGCTCGAG	2040
AAAGGACAAA TTTTGTCTT TCTTTTTTGA TATTCAGAGC GATAAAAATC CGTTTTTTGA	2100
AGTTTTCAAA GTTCCGAAAA CCAAAGGCAT TGCCTTGAT AAGTTGATG AGATTATTGG	2160
TCGCTTCCAA TTTGGCGTTT GAATAGGGTA GTTGAAGGGT GTTGACGATT TTCTTTTTGT	2220
CCTTTAGAAA GGTTTTAAAG ACAGTCTGAA AAATAGGATG AACCTGCTTC AGATTGTCTT	2280
CAATGAGTCC GAAAAATTTC TCCGGTTCCT TATTTCTGAAA GTGAAACAGC AAGAGTTGAT	2340
AGAGCTGATA GTGATGTTTC AAGTTTTGTG AATAGCTCAA AAGCTTGTTT AAAATCTCTT	2400
TATTTGGTTAA GTGCATACGA AAAGTAGGAC GATAAAATCG CTTATCACTC AGTTTACGGC	2460
TATCCTGTTG AATGAGTTTC CAGTAGCGCT TGATAGCCTT GTATTCGGGA TTTTCGATGA	2520
AACTGATTCA TGATTGGAC ACGCACACGA CTCATAGCAC	2560

(2) INFORMATION FOR SEQ ID NO: 115:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 11303 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 115:

TATTGGATTT CCCTTGCAAT CAGTTTATGG GACAAGCACC CGGCAGCGCA GAGGAAATCA	60
ACGCCTTCTG TAGCCTACAT TTTCAAACCA CCTTCCCACG TTTTGCCAAG ATTAAGGTCA	120
ACGGTAAGGA AGCAGACCCT CTCTATGTCT GGTACAAGA CCAGAAATCC GGCCCACTAG	180
GAAAACGAGT CGAATGGAAT TTCGCTAAGT TTCTCATCGG TCGAGATGGG CAAGTCTTTG	240
AACGCTTTTC TTCAAAAACA GACCCAAAAC AAATTGAAGA GGCGATACAA ACTCTACTAT	300
AATTCACAAT CTCCTATGA TTAGGTTTCC TTAACTTGA TGAATAGTGA GATTTTTTGA	360
TGGGCTTTGA CTAAATAGA AAAACACCCC ATGATATGAA ACATGAAGTG TTGTAAAGTC	420
TATGTTGTAG GTGCTTATTT CACAATTCA ATGTGACCAG TGATAACGAA TACCATACAG	480

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AATCTTCATA	TACACTAAAC	AAATGACTTT	CTAATTATTT	CAATTAGTTT	TGGCTAGTAA	540
ATATCATTTTC	CAACAAACGC	CCTCTCAATT	CCTTATCCTG	ATGATGCAAG	ATATTCATTA	600
AGTCATGAGA	GTTTTTCGCA	TTGATGAATT	GATTTAACAA	TCTATCTTTT	AATTCATATG	660
GAAGAGAAGC	TGCTTTTAGT	AGTCTAAAAA	CTTCGTCATT	TAAAGATGTC	CTTTTATTAT	720
CTTTCCATTTC	AAATTTAGCT	GTATCATTCT	TATTTGGCAA	TTCAATTATA	GACACATTCG	780
TTCCTTTAAA	ATGAATTCTA	TGTTTTCTAT	TGCTTGGAAC	GATACTAGAA	TCTCCTTGTA	840
ATGCTAACTC	TACCATTCCC	ATTTCCCAAT	CGATTGATAA	TCTTGTTTTA	TATCTTTGAC	900
CATTTTGATC	TTCAAGCATT	TCAAAAGAAT	GTTGTTTTCC	TGGGAATACA	TACCAATCTA	960
CAACTTCAGG	TAAATCAACA	CCCATACCTA	TCTCAGAAC	AACCAAGGGA	ATGATTGCAC	1020
CACTTTTTGC	AAACACAGGC	GTAGTCGAGA	TGTCCCTATA	AACACTTAAC	TTCACACCAC	1080
CTGTGTATTT	TTTCTCTGAA	AAGAAGTCAT	ACCATTACCC	TTCAGGGAAC	CATACATCTA	1140
CTTTTGCAGA	TTGGAATGTC	AAATCCATCT	TTTCTACAAT	GGGAGCCACC	ATCAGTTCTG	1200
TTCCAAAAAA	GTATTGGTTT	GGAACATTAT	AGCTCTCATC	ATTCTCTGGA	TAGAAATAAT	1260
AGATTGGACT	GATTAATGGG	GCACCTTCCT	CATGTGTCTG	TACATTTCATG	GTATATAGAT	1320
AGGGAATCAT	CTGATGTCTC	AAACGAAGGT	ATTCTTCAT	AATCTTAGAT	GTTGTTTCTG	1380
AAAAAAACCA	AGGTTCTTTA	CTATTAAAAG	GACTTCTAGA	ACTATGTAAT	CGAGTAATCG	1440
GACTAAAAAC	ACCAAACGT	AGCCATCTAG	TTTGTAGCTC	TTCGTCATAA	TCCCCAACA	1500
TATGTCCACC	GATATCATGA	CTCCACCAAC	TATAACCGAT	ATTAGATGCT	GTCGCTGTAA	1560
AATAGGGTTG	AAATCTTAAG	GAATTCCAAC	TAATAATAGT	ATCCCCTGAA	AAACCAACAG	1620
GGTAGCGGTG	ACTACCAGGA	CCTGCATATC	TTGATAAAAT	CAAACCACT	TCTGCATTTT	1680
TACAACATATC	CTGATAGTGA	TAATGGTTTA	AAAGCCAAAG	TGGATCTAGC	ATACCTTGTG	1740
TCCCTTGTGTG	CCAGTCAATC	CACCAAAAAT	CTACTCCCTG	CTTTTCTAGT	TCATAATGAA	1800
CATCTTTTAAA	GTAGGCTTCC	CTAAAAGAGG	GATTAAAAAA	ATCAAAAATA	GCAGGTTCTT	1860
CTAGTTCTAC	ATTTAACCCC	AACCGTTTTG	CGATTGAGG	ATAAGCTTCT	TCATAAGCCC	1920
GTATCCCATC	AGCAGGATGG	ACATTTAAGG	AGAGTTTTAG	CTTCTATCA	TGAAGTTGTT	1980
GCAATAACTG	TTCTGGATTT	GGTATTAAGT	TTCTATTCCA	ACTATATCCT	GTCCAGCCAC	2040
TTCCAAAGCG	AGCTGGAATG	TCAGTTATAT	GCCAATCCAT	ATCTAACACA	CCGATAGATA	2100
ATGGAATTTT	CTCTGTTTCA	AATCTGTCTA	TTAAATCCAA	GTATTCATCC	GACGTATAAG	2160
GCCAATATCT	ACTCCACCAA	TTGCCTAAAG	CATATCTTGG	CAACAAGGGT	GTTGAACCAG	2220
TCAATGGTA	AAAATCTCTG	ATTGCTCCTC	TATAATCATG	CCCATAGGCA	AAGAAATACA	2280



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GGTCAATTG	ATTTTCTCTC	TCAATATAAC	CAGATTGTTC	ATCCCAAATA	AATCCTTGAG	2340
AATCATCCAA	TAAGGCTATA	CCATTTCTGC	TAATAATTCC	ATCTTCTAAC	GAGATTGCTC	2400
CATCTGCCTT	ATCCAGAGTC	CGAGCTGTTC	CTTTTAACGT	TTCAATAGAT	TCACCAAAAT	2460
ACCAGCGACT	ACCATATACG	GCAAAATTTC	CTTTTAATTC	TATAAATAAA	TTTTCGGCGT	2520
TAAATTCTCC	TTTATTAAAG	TGCAGATGAA	AATAGTCCGT	CATAATATCT	AGTACGTTTG	2580
ATGTCTCGAT	ATAATCTAAC	GAAATTTGGC	CAAAATCTCT	ATTATAGATA	AGTTGTGTCTG	2640
TTCTATCCTC	AAAACCTCCA	GTTTGAGAGT	ATTCTAACCT	TACTAGCTTG	TCTGTTAATA	2700
CAGAGATTCTG	ATAAAACTCT	CCCTTAAAAA	TTTCAATTT	GTTTTCCTCC	TTTATGGTA	2760
GCATAAAAAAC	AGAACGCACC	ATTTTGTATG	CGTTTTTCAT	TATTCTGAAT	GCAATGTTCT	2820
ATCTGTTATA	TCTATGACAA	ATAATAGTCA	ATTGAAAAAA	TGCAGTGGAC	AAAATATCTT	2880
TTAACAAACC	AAGAGTTTAT	TAAAGAGTTA	TCACTTTTCA	ACTTTTCTAA	GCTTATGCAG	2940
TTGTGAAACA	AACTACTTTT	AACTATTAA	CTAAGATAGG	ATTGATAAAT	AATTTCAAAC	3000
TCTTACTAGC	AATCATAACG	TATTCAAGCT	CACGTGCTTT	TTTCCTTCCT	GCTTATTTCT	3060
TAGAACTGAA	GAACCCGGAT	CGGTATATAA	ATTATCCGGA	TCAACATAGT	CATAAGATTC	3120
ATAACAGTTG	CGCTTCATTA	AGTCATCCCC	AGAGCAAGAG	CTTCATCTCG	TAATTTTTC	3180
ACATCACTAA	CCGTAGGTCG	CCATCCTTCA	ATCATATTG	TACTTAAAGC	ATACCAAACA	3240
CTCTTAAAAA	CGGATCGGTT	TTCAAAAGCT	ATTCCCATGA	TTGTCATCTT	TTCTTTATCT	3300
ATATCTAAGG	ACATATGCTA	CCTCCTTTAG	ATACATTATA	CCATGTTTCT	CTGTAGCTTT	3360
TAAAAATTTT	ATTTTGTTTG	TCATATCTAA	GTTTTCAGCA	CGCTTATCCT	ATTTTATAAG	3420
CCTCAAACCC	AAATATAAAA	CGCATTCCTT	TTGCTTTTTT	ACTATTGTAT	CGTATTCTAC	3480
GATAACATAC	TTTACTTTAT	TGTTTTTTTA	AATAACAGCA	GTTCCCTGTT	TATCAACTAT	3540
TCGAACTACT	TTCTATTTTG	CTTCATACCC	TACATAGCGA	AAAAATATGA	AAAAGCAGAG	3600
AAGAATATCT	TAAAAAGACC	TCTTCACTGC	TAATATTAAC	ACTCATTATT	TAAACTATAT	3660
GGATTCTATC	ATCGAGTATA	CTTTTTTACT	TATTAGATAC	CTTGCTCTTC	TTTCACCAAT	3720
TTTGTATCAT	ATACACGGAT	GAATGGAAGA	TAGACTAGGA	ATGCTGCAA	TGCACATACT	3780
AGAGCAACTA	ATACAGCTCG	AAGATCTGCT	GTCCCTAAGA	AAGCTCCAAT	CCCTACTGGA	3840
GTTGGCCATG	GAACCTGTGC	GATAATTGGC	TTAATAAAGT	TTAGAGAATT	CGCTACGTAA	3900
TAAATAGTAG	CAGTAACCAT	TGGTGCTAAA	ATAAATGGTA	TAGCCAAGGC	TGGATTATAG	3960
ATAATAGGTA	ATCCAAAAAT	TAATGGTTCA	TTAATATTAA	ATAAGGCTGG	AACTACAGAT	4020

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GCTCGTCCTA	TGCTTTAAG	CTGTTTCAGAT	TTAGAGGCAA	AAGCAATATA	TAAACATAGT	4080
CCTAAAGTTG	CACCAGAACC	ACCTGCAATT	ACAAACATAT	TAGAAAATTC	ACCTGCAACA	4140
GCGAAGTGCC	CGCCAGCAGC	ATTTTCAGCC	ATGTTAGCAA	GAGCAATTGG	ACTAACAAAT	4200
GCAAAAAACAA	TGTTTCGCACC	GTGGATACCT	ACAATCCAAA	GTAGTTGAGT	CAATAGATAA	4260
ATAATCATTA	AACCAATCCA	CGAATTAGTC	AGATTGGATA	CAAAACCCAA	TGGAATTGCA	4320
ATGACTTTAA	AAATATCTGT	TCCCATTGCT	ACAAGAAGAC	CGTTGATAAA	GATAACAACA	4380
AATGCAACAA	CAAATCCCGG	AACCAAAGCG	GTAAATCCAC	GAGAACTCC	TTCTGGAACA	4440
GCTTCAGGCA	TTTTAATAAC	CCAATTATGT	TTAACACACA	TACGATAAAT	AAGAACAGTC	4500
ACAATTGCCA	TAATGATTGC	GGTAAAAATC	CCTGTTGTCC	CAAAACGTGC	GACTACATTT	4560
CCCATTGCCC	ATCCATCTGC	AATTACTGCA	CCTTCTTTTA	GACTTGTCAC	AGTCTTCATC	4620
ATTCCACCAT	CAAAAATGAT	TTGCGGTACT	GTCATGACAA	AAGCCATCAA	GGCAAGCAAG	4680
GCACCATTAA	GAGGATTCAT	ATTGAGTTCT	TCTTCCTCTG	CATAAATTTT	TGTCAATTCA	4740
TATGCAAGTG	ATAGAACGAA	ATAAAGAGAT	AGAGAACCCA	TAGTCGCATA	GTTTGCAACC	4800
ATGTAAAGTG	ATGTGAATTT	ATCAAATGAA	GCAGAGAAAA	TATCTGCCAC	AATTGGCCAA	4860
AATGAGAAAG	CTTGTGGCAA	AATACTGAAT	ACCAAAAAACA	TTGATCCTAC	AATAGTAAAT	4920
GGTACAGCAG	CCATACCTGC	AGCCGTGATA	GCACGTACTA	CTTTAAACTG	AGCAAGTTTG	4980
CCCATTGGTG	CCATAACATG	GTTTTCAAGA	AAACCAAACA	ACCCGTTTGG	TTGATCCATA	5040
AATAGACCTC	CTTAATAAAA	CATAATAATT	TTTACTTTCT	AAAGACTAGT	TTCAAATACA	5100
AATTATACTA	GATCAGGATT	ATAAACTAAG	TGAGTCTTTT	TCCAATTGGA	CAAATTGTTG	5160
ATAAGCCTTA	TCTGTTTCGTT	TATAAATTTT	TTTAATTCCT	CTAATGTCTA	ACAAACTCAG	5220
AACTAAACCT	AATAGAAGAA	CTACAAAAAC	AAATAAACGT	GCTACTTGGT	TATTTTCAAA	5280
AATCGGAAAA	AGATTCTTAA	ACCAACTTGT	CCAAGTTAAA	ACAAGTAATC	CTATTGAAAT	5340
AAGCATTTGT	ATTCTAACAA	ACATTAGTGT	TATTCCCAAC	TTTTCTTTCC	TATTTCCA/TA	5400
AAGTTTAAAT	TGTTCAACAG	TTGCTAAAAT	AGAAAATACT	ATGAGCATAA	TGGGGAAAAAT	5460
AATAATAGGC	GAGGGACTAA	TAACTGACT	CAAAAGCCAA	TAAATATTCC	CAAAAAAGAA	5520
GAGTGCTATT	GAATAACGTA	GAAGAAGATA	TCGATTGAAA	AAAGTATTAG	TTAGAGCCAT	5580
CTCTCGACGT	TGTTGTTCAA	TCTTTTGTCTG	TTCTTTTTTA	TCCATATCAT	TTCTCTCCTTA	5640
TATAACAACA	CATATTTAGT	TAACTTTCTT	ATAAAGAGCT	AACATTTCCCT	TTGCTACTTC	5700
TAATAATGTC	ATAGTGGTCA	TTAAATGATC	TTGAGCATGT	ACCATGATAA	TTTCAATTTT	5760
AATTTCCACT	CCACTTGCGT	ATTCTTGCAA	GAGTTTGGTT	TGTGCATGAT	GCGCTTCAAG	5820

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AATTATCTCA	TTTGATTGAT	TTAATTTACT	TTCTGCATCA	TCAAAACTAC	CTTCTCTCAT	5880
TTTTGCAAAT	GCTTCATGTA	TTTCTGACCT	TGCATTTCCC	GAATGCAGGA	TAATTTCAAA	5940
TGCTGCAACC	TGCAGTTCCT	CTTGATTGAT	ATAAACCTCC	TATTTTATCT	TCTCAAATAT	6000
GTTAATAAAA	TCTTCAAAGT	TATTGCAAGA	TATTAGCTGA	TTTTGCAATT	CATCATTCTC	6060
TGTCAGAGAG	ACTATCTTTT	TAGTCACAGT	TGCCAAACCT	TCGTTCCCAT	ATATTGATGG	6120
AGATAGAAGA	AATACTAGCT	GGACATGTGA	ACTTTGATTA	TCCCAGAGTA	ACGAATCTTT	6180
ACAAATTGCA	ACCGAAACCT	TTCCCTCTGT	ACCAAAGGCG	TGAATAGGAT	GCGGAACGTC	6240
AATTTTTTCA	GAAAAAACAA	CTGAACCTAA	TCTTTCGCGC	TGTTTAATTC	CATAAAGTAA	6300
AGATTGTTCA	AACTCATTG	ATTACCAAC	AGATAAACTC	TCAACCATCT	TTTCAAGTAA	6360
ATTTACCTTG	TCTGATTGAG	TACATATTAA	AAAGTTTCT	TTACTAAAAT	ACTGTCTAAA	6420
GCCGTGTGTT	TCAAATTG	TAATCTTTGA	TGATTGTACA	TAAGTAGAAA	CTTGCATCTA	6480
ATCCATAGCT	TTTCTAATCA	TTTCCATCTC	ATCACTCTTA	AGAAACACAC	TAAGTTTAAA	6540
AACTGGGATT	TGAAAATATA	GATTTGATAA	ATCAATAGCT	GACACTATAA	AATCTATGCC	6600
TTTAAGTTTT	TCTTGATTCA	ATTCATAGTA	GCCTATTACA	TCAACAACCT	CTACTCGCTT	6660
CCCAAACCTC	GTTTCCAAAC	GATTTCTTAA	CATTTGGGCT	GCACCAAATC	CTGTTGCACA	6720
AATAGCAAGA	ATATTAAACT	TAGTACTCTC	TTTGCTACGT	TCCATAGCAG	CTAAAAAGTG	6780
AAGACTTACA	TATGCTACTT	CATCATCTGA	TATTGTCCAC	TCCAAGAAGT	TGTCCATATT	6840
TGCAAGAATT	TCTCTAGTCA	TAAAGAATAT	ATCACTATAA	TTCTGTTTAA	TTTCATCTAC	6900
CAAAGGGTTA	TTTAAGGTAA	TCCGGCTTTC	TAAACGTACT	TGTAGTGTCA	TTAGATGAGT	6960
TATCAATCCT	TCAATTAGTT	GGAAATCTGA	AGAAAAGTTA	TACATATCAT	CTAATCCTAA	7020
ATTCTGAAAT	GTTTTAAATA	AAGATTTTTT	TAAAACCTCT	TCAGAAATAT	TCTTCTGATT	7080
TTTTTGACAT	TGTTGACTCT	TAGCTAACAA	ATGCAAAGTA	ATGTAGTCTA	TTTCCTGAAC	7140
TGGAAATTCC	TGATTTGTTA	CTTCTCTTAC	TTTAGAAAGA	ATTCTTTGGG	CAACCTTTCT	7200
CTCTATTGCA	TCATCAGTCA	TCTGACAGTC	TATATTTTTT	ATTTCAAATC	CGGATTTTAA	7260
ACGAATCACA	GACAATGCTA	TGTGAACTAC	TAAATTCTGT	AGTACAAAAT	CAGATAGTTT	7320
TAGGTTGGCC	TCTTGGCATT	CATCCAAAAC	AATTCTAGCA	AATTCTTCTA	ATGGAACAGT	7380
TTGATCAAAA	AAGTTAAATT	TTACATAGCA	ATGTATTGTT	TTAAAAAATT	GATTCTCTAG	7440
GAAATAATTT	ATGATAAAAC	GTCGTTTATC	ACGTTCTCTG	CCTGAGACAT	AAACTCCTTT	7500
ATTCGCCCTA	CTCTCAATGG	ACAAATTATA	CTCTGATAAC	ATCACTCGTA	TCTTTCTGAA	7560

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ATCATGAGAT AATGTTGAAC GACTAACGTA AAGTTCATCA GCTAAATCAT CAAAAAGAAC	7620
TGGAACCTGC TCAAAATAATA ATTTATTTAA GATAAATACT AAACGATCAT CACCTTTTGA	7680
AACCGCAGTT TTCGTATAGT CTTCTTCCAG TTCATAAGTT TGTCTAAACT CCTGGTAAGC	7740
GCCTTGATTC TCAAAAAATA TTTGATACCC TTGACCTTGT TTTGAAATCA ACCGGACTCC	7800
TTGAATAATC ATTGTCTTCT CAATTAATTT CAGTACATTA CGGACAGTTC TATCTGAACA	7860
GGATAAATAT TCTGCCAGTT CTTTGCTTGT AACAAAACGT TCCTTATTTT TTATTAAAAA	7920
TTGAAGGATA TCTTTCTCTT TAATGTTTAA CACATTCATT CCCTCCTAAA ACGTATGTTT	7980
TCATATATTG AAGCATATTA TACACTTAAA TCAGTTTATA TCAAAC TCAA AACAATTTAT	8040
CTTAAC TAA ATATTTATTG ACATTTTCATG TGTTCATCAA ATATTCTCAA GAATCAAATT	8100
AGCCATTTTT TCAATTCCCA TTGGAATAGG AATATAGGCT TGAGGAGGTA TTTGTACAAC	8160
TGGTTTTCCCT GCTTTAGAAC CAGCCTCTTC AAATTGCTTA AAGTACATTT TTGTTTGAGG	8220
ACTGACAAGA TACAAATCAA AAGCTGCTGC TGCATAGCT TTCCCTCCTT CAGTAGCACT	8280
AATAGCATCA ACTACAATAT CTTTCCCTTT TCCTTTTAGA AACTCTGTTG TTTTCTGTGC	8340
CATAAGTGAT GAAGACATTC CTGCTGCACA AATAATTAAA GCTTTTGCCA TAATATTTTC	8400
TCCTTTTCTT AAATCCAATC AAAGCTGTGC TAAGTTGGCT TATTTGTTAT CTATTTTAT	8460
TATAAAATAA AGCGTTTCCA ATGACAATTC CCTCATTTTC CTAAATGATA TGGAAAAAAA	8520
TTATTTATAC TTCAATTTAT AAAATAAAAT TATTCCTGAG AGTAGAAATG AAACACTATT	8580
TGCTAAAATC AAAGGCAAGT CTCCTATACG AATACCATGA GCAAGCCACA ATGCAATACC	8640
AATAACTTGC ATAACATACA TACCTAGAGC AATAGATCCT GTGTCCTTTG TCTTAAC TAC	8700
ACGAAAAACT TGTGGTAAAA ATGCAAATGT TGTTAAAATT GCTGCAATAC TTCCAATCAT	8760
ATGTCACCTC AATATGCTAA ACAAACTGAG AATAATCTCA GTTTGTTTAT ACTATTCTAC	8820
TGATTACCGG TTAGATGAAA TAACTTCCTT ATACCAGCCA AAAGATTTTT TCGGGGAACG	8880
ATTATAACTT CCCTTCCCAT TATCATCTTT ATCTACATAA ATAAAGCCAT AACGTTTCCG	8940
CATTTACCG GTACCAGCTG AAACCAAATC AATACATCCC CATGGAGTAT AACCCATTAA	9000
ATCAACACCA TCTTCAACTA CAGCCTTTTT CATTTACGA ATATGGGCAC CTAGATATTC	9060
AATTCATATA TCATCATGTA CCATACCATC TGCTGCAACT TGATCTATAG CTCCAAAACC	9120
ATTTTCAACA ATAAAGAGTG GTAAGTGATA GTGGTCTGTA AACCAATTTA ACGCATAACG	9180
CAAACCTTCT GGATCAATTT GCCACTCCCA TTCAGAAGCC TTAACATAAT TATTTTTCAC	9240
TAAATCTTCT GTTTCAAGAT AATCAAAATA AGGATTATTT TCACGATGAG AGTCGATAGC	9300
AAAGGACATA TAGTAACTGA AACCAATGTA ATCTACAGTC CCACCAAGTA AATCTTCTTT	9360

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ATCCTGGGCA	GTAAAATCAA	CTGAAATACC	TTTTCGTTCC	CAATACTTGA	AAATATGCTC	9420
AGGATATTTA	CCTAAAACAT	GCACATCAGC	AAAATAATAA	CGCTTCTGCA	TAGCTTTCAT	9480
TGCCATTAAG	ATATCCTTAG	GATTGCAAGT	AACTGGATAA	ATTGGACACA	TCGCAATCAT	9540
ACAACCTATT	TGAAAATCTG	GATTAACTCT	ATGACCAATT	TTTACAGCTC	GTGCAGAAGC	9600
AACTAATTCG	TAATGTGCTG	CTTGATACAT	AATTGCTTCT	CTATTATCAC	CTTCCTCATA	9660
TACAATACCT	GAGTTAGTAA	ATGGTGCAAA	ATCTTCCTGA	TAATTCGCTT	GATTATTGAT	9720
TTCATTGAAA	GTCATCCAAT	ATTTAACCTT	ATCTTTGTAA	CGTTTAAATA	CGACTTCTGC	9780
AAAACGAGCA	AAGAAATCAA	TCAATTTCCT	ATTTTTCCTA	CCACCATATT	CGGTCACTAA	9840
GTGATAAGGC	ATTTCAAAAT	GAGATAGAGT	GATGACAGGT	TCAATACCAT	TCTTTAAGCA	9900
TTCATCAAAA	AGATTATCAT	AAACTGTAA	TCCTTCTTCA	TTCGGCTCTA	ACTCATCACC	9960
TTTTGGAAAG	ATACGTGTCC	ATGCAATAGA	GGTACGGAAG	CACTTGAATC	CCATTTTCAGC	10020
AAAAAGTGCT	ATATCTTCTT	TATAACGGTG	ATAAAAATCT	ATCGCCTCAT	GATTTGGATA	10080
ATATTTACCC	TCTAAAACTC	CCAAAGTAAT	TTCACGAGCT	ACTCCATGAC	GACCAGCAGT	10140
CATAACATCA	GCAACACTAA	TTCCCTTGCC	ACCTTCTTGC	CATCCACCTT	CAAGTTGATG	10200
AGCAGCAACA	GCACCACCCC	ATAAAAATCC	ATCTTTAAAA	GTAGTCATCT	TTTTTCCTCC	10260
TGACTTTGAT	ACTCTTATTA	TAAACCTTAA	ACCAAAAGAT	GAAAACGCAT	TCTTTTTCCT	10320
TATTGTAAAG	GAAAGAAGTA	ATTTTAAATG	GAAATAGAAC	AATATCTTCT	TGTATTCTCG	10380
TAATGATATC	TTTACGATTT	TCAATACTTT	CAAACACAA	AAACTCTCAC	AATAATCTTA	10440
ATTCCCTGTG	TCTATAAACG	ACTTATCGCT	TTCTGGCATC	CCAGAATCAT	CTTCTATATA	10500
ACGTTCAACT	TGCATCTGCA	AGTGATATTT	TTTTCTTAAA	TCTAAGATTT	TCTGCATTGT	10560
CTTTGATTGA	TAATGTTTAT	CTAAAGTTTC	TTGATTTATC	CACTGATCAA	TAAGGAGAAT	10620
AGTTCCCTCT	TTTTCAATTG	GTAAAAAATA	TTCGTATTTT	AAGTTACCTT	TTTGATTTCT	10680
AATTTCTTTA	ACAAGGCCAC	TATCAAGCAT	TTCTCTTGCA	AACTTTATTG	CACTATCTCC	10740
ATCACCTTTA	TAATATACAT	GAATAGTCAA	TGTCATCTTA	TATCCTCCAA	AATCATCCTT	10800
CAATTTTAAA	AAAACAAGTT	TAGATGAGGA	TCTAAACTTG	TTTTTTATGA	ACTAATTATC	10860
TAACGTTTCG	CCATTACTTT	CAATCACTTC	TTTATACCAA	TAAAATGATT	TTTTCTTATA	10920
GCGATTTATA	GTCAATTGAA	ACAAGAGCAG	GACAAAAGAG	CCTCATAAAA	GGTATTGCAA	10980
CTTGGAATA	CCTTTTGTAG	GTGCTTTTGT	ATATGAGCCC	ATGTTTCTCT	AATAGGATTG	11040
TACTCAGGTG	AGTAGGGAGG	AAGAGGTAAA	AGTTTATACC	CAAACCTCTC	ACACAAGAGT	11100

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TCTAGCTTCC CCATTCTATG GAATCTTGCA TTATCCATAA TAATAACCGA TGGTGTGGTT	11160
AATGTTGGTA AGAGAACTT CTGAAACCAA GCTTCAAAAA AGTCGCTCGT CATCGTCTCT	11220
TCGTAAGTCA TTGGAGCGAT TAACTCACCA TTTGTTAGAC CTGCAACCAA AGAAATCCTC	11280
TGATATCTTC TTCCAGATAC TTT	11303

(2) INFORMATION FOR SEQ ID NO: 116:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 3112 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 116:

CCTTAGATTT CCACTTGCCA GAGGAATTGA TTGCCCCAAC GCCCCCTGAA AAACGTGATG	60
CCTCCAACT CCTCATCGTC AACCGTGAGA CAGGAGAAAT GCAAGATAAA CATTTCCACT	120
CTATTATTGA TATGCTGGAA CCTGGTGATG CCCTTGTCAT GAACGACACC CGAGTTCTCC	180
CTGCCCGCCT CTATGGTCAA AAAGTGGAGA CAGGAGGTCA TGTGGAACTT CTCCTCCTTA	240
AGAACACTAG TGGAGACGAG TGGGAAGTTC TGGCTAAACC TGCCAAACGC CTCGAAGTCG	300
GTACTCGTAT CAGCTTTGGT GATGGCCGCC TCAGCGCTGT CGTTACAGAA GAATTGACCC	360
ACGGGGGACG CATTTGCCG TTTGAATACC AAGGAATTTT CCTAGAAGTC TTGGAAAGTC	420
TGGGAGAAAT GCCTCTGCCA CCTTATATCC ACGAAAAATT AGATGACCGT GAACGTTATC	480
AAACCGTCTA CGCCAAGGAA AGTGGCTCTG CTGCAGCACC GACTGCTGGT CTTCACCTCA	540
CCAAAGAACT GCTGGCAGAA ATCCAAGCTA AGGGTGTTCA TCTAGTCTAT CTGACTCTCC	600
ATGTCGGA CT CGGAACCTTT AGACCTGTTT CTGTGGATAA TCTGGACGAA CACGAAATGC	660
ACTCAGAGTT CTATCAACTT TCTGAGGAAG CTGCTGCCAC CCTTCGCTCT GTCAAAAAAA	720
ATGGTGGTCG TGTCATCGCT GTCGGAACCA CTTCTATCCG CACCTTGGAA ACTATTGGTT	780
CCAAGTTTGA TGGGCAAATC CAAGCAGATT CTGGTTGGAC CAATATCTTT ATCAAACCTG	840
GGTATGAGTG GAAGGTCGTG GATGCCTTCT CAACCAACTT CCACCTGCCA AAATCAACTC	900
TGGTCATGTT GGTTCCTGCC TTTGCAGGCC GTGAATTAGT CTTAGATGCC TACCACCATT	960
CCATCCAAGA ACACTACCGC TTCTTCAGTT TTGGTGACGC CATGTTTATT TATTGAGAAA	1020
GAATTTCTCT AAATCTCTA ATACCAATAA ATCGCTAAGA TATTATTTCA AAGAACATCT	1080
ACAATTGAAA CTCTAGCTAG CTGTAGAAGA GGCCTAGTAC ATTGAAATTA AAATGCTTCC	1140
CCCTAGCTTC GAAAATATTG CCATAGATTG CGTTGACTCT CCAAATTGAT TCATCTATAT	1200

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TTTATTTCAG	CTTCCTATAC	TTTCTTCGCT	GTTTGTAAT	CAAAATGCAA	GACACATGAG	1260
TAGCACCATA	TTTGTTACTC	TTATCTGTCC	TCTCAAGAGA	CTATTATGAG	TTATTTCAGA	1320
ATCATTCACT	ACTTTGACCC	TGACTCTCCT	TAGTCTCAAA	ATCAAAGACT	TATACTCTTC	1380
AAAAATCTCT	TCAAACCGCG	TCAACGTCAC	CTTGGATTAT	ATATGTGatC	TGaCTTCGTC	1440
AGTTCTATCT	ACAACCTCAA	AGCAGTACTT	TGAGCAACCT	GCGACTAGTT	TTCTAGTTTG	1500
CTCTTTGATT	TTCATTGAGT	ATTAAACAAA	AAGTGAACAA	ATCTGAATTC	TAATGTACAG	1560
AAGACTAGGC	TTGTTCACTT	TTTTATAGTC	GCTATAAGAT	GACCTTATCT	ATAGCTTTTT	1620
ATATATAATT	ATATATTCAG	ACATACTATT	ATCAATTTTG	TCGCAGGGAG	GAATCTGTTA	1680
ACGCACCCAT	TCACCATTAT	CATTGACTCT	ATAGCCATCT	ATACTTGTAT	TGACCCTAA	1740
CTCACCCGAT	GTATTTACAT	AATACCATTT	ACCACCAACT	TGGAACCATT	GATTGACTTT	1800
CATAGAACCG	TTGCTGTTGA	GGTAGTACCA	TGAACTATTA	ACTTGTACCC	AACCTGTTGC	1860
CATGGAACCA	TCAGTATTAT	AAAAATACCA	CATACCATTT	TCTTGTTTCC	AGTCTGTGTT	1920
TGGAGCAACT	GCTTTAGCTG	GTTCTACTGC	TACATCTGTT	CCTTGGTTAG	ATGTAACAGA	1980
TACAGGATAC	GAAGGAATAG	ATGATTGCTC	AGGAACAACA	ACTTTTTCAG	GTTCTCTCGT	2040
CCCTCTCCTT	ATACGTCTTT	TTACCATCTC	TTTAGTAATT	TGACGAGAAG	TAGTTTCTTC	2100
AATTGTTCCA	TCACGTTCAT	CTACAGTATA	GATGTAGTA	AGAGTAATTT	ACCAATTTCT	2160
CCTACTTCTT	CTACTTCTTG	ACTTTTATCA	AGAGTTGGGC	CATCGAGATA	TTCTGTTTCC	2220
ATTGGAATTT	CTTGACAAG	AACTTGGGGC	TTGGTTCTTT	TTTTAACAAC	TCTTGTTTGA	2280
GAGTCTTTTT	TTTGACTTAA	AGTACTCTCA	GTTACTTGTC	CACTCTTTCC	ATCTACATTA	2340
TAAGTTATCG	TTGTAACGTG	TTTCCCATTC	TTTCTAGAG	TAATCTCTTG	CTCCTGTCCT	2400
GCAGAAAGGT	CATTGTCTGC	TTCATATTTA	GTAGCAAATG	GAACAAGAAC	TTCTTCAACC	2460
TTGCTTTTAG	CTGGAACTTT	GATAACTGTA	TCCGTGGCTT	CTTTTCTATC	AACAGTAACC	2520
TGTCGGTAA	CATAACCAGT	CTCTGGATTA	ACATCGTAGG	TCCTTGTCGT	AGTTACATAG	2580
CCATCCTCTC	CATCAATTGT	AACAGGATTT	TCACTACGGT	CTTTTGTTTC	ATCTTTTTCA	2640
TAACGAATTC	GCGTACTTGA	AATTTTCTTG	GTTACTACCT	TAGGTTTAGT	CGCTACTTTT	2700
ACAATAATAT	CCCCATTGTC	AGCGTCATCA	TACTCTATTC	CCTCTTCTTT	ATCTCTAGTA	2760
TCATCTCTGA	CATATTGAAT	CCCATCAGCA	GCATGAACAA	AACTTGATTT	CAGATTCCTC	2820
CTAAAAATAA	AGTTAGCCCG	ATTACCGCAG	AACCAAAAAT	CTTTCCGAGT	TTACGTATTG	2880
CATAGCGCTT	ATTAGTATTA	GATTTTGCCA	TTACATCCTA	CTTCTAGTAT	AGCATCTTTT	2940

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CTATCAAACG TTAAACAATA TACGTTATAT ATAAAATAGA CTTAGAATGA TATATTGATT	3000
ATTGAACATA CACTTTAACT ATATCGTAAT CAATCTCATA TATAAAGGAT TGCAGACATC	3060
TTATCTAAAT ACATGCGAAT ATATTTAGAT ACAAACATTC CAACTTGATA AT	3112

(2) INFORMATION FOR SEQ ID NO: 117:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 4327 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 117:

CCCAAAAATC TCTTCAAACC ACGTCAGCTT CGCCTTGCCG TAGTATGGTT ACTGACTTTCG	60
TCAGTTCTAT CCACAACCTC AAAACAGTGT TTTGAGCATC ATGCgGCTAG CTTCTTAGTT	120
TGCTCTTTGA TTTTCATTGA GTATAAAAC AGATGAGTTT CTGTTTTCTT TTTATGGACT	180
ATAAATGTTC AGCTGAACT ACTTTCAAGG ACATTATTAT ATAAAAGAAT TTTTGAAC	240
TAAAATCTAC TATATTACAC TATATTGAAA GCGTTTTTAA AATGAGGTAT AATAAATTA	300
CTAACGCTTA TAAAAAGTGA TAGAATCTAT TTTTATGTAT ATTTAAAGAT AGATTGCTGT	360
AAAAATAGTA GTAGCTATGC GAAATAACAG ATAGAGAGAA GGGATTGAAG CTTAGAAAAG	420
GGGAATAATA TGATATTTAA GGCATTCAAG ACAAAAAAGC AGAGAAAAAG ACAAGTTGAA	480
CTACTTTTGA CAGTTTTTTT CGACAGTTT CTGATTGATT TATTTCTTCA CTTATTTGGG	540
ATTGTCCCC TTAAGCTGGA TAAGATTCTG ATTGTGAGCT TGATTATATT TCCCATTATT	600
TCTACAAGTA TTTATGCTTA TGAAAAGCTA TTTGAAAAAG GTTCGATAA GGATTGAGCA	660
GGAAGTATGG TGTAAATAGC ATAGGCTGAT GTCCATCATT TGCTTATAAA GAGATATTTT	720
AGTTTAATTG CAGCGGTGTC CTGGTAGATA AACTAGATTG GCAGGAGTCT GATTGGAGAA	780
AGGAGAGGGG AAAATTGGCA CCAATTTGAG ATAGTTTGTT TAGTTCATTT TTGTCATTIA	840
AATGAACTGT AGTAAAAGAA AGTTAATAAA AGACAAACTA AGTGCATTTT CTGGAGTAAA	900
TGTCTTATTT CAGAAATCGG GATATAGATA TAGAGAGGAT CAGTATGAAT CGGAGTGTTT	960
AAGAACGTAA GTGTCGTAT AGCATTAGGA AACTATCGGT AGGAGCGGTT TCTATGATTG	1020
TAGGAGCAGT GGTATTTGGA ACGTCTCCTG TTTTAGCTCA AGAAGGGGCA AGTGAGCAAC	1080
CTCTGGCAAA TGAAACTCAA CTTTCGGGGG AGAGCTCAAC CCTAACTGAT ACAGAAAAGA	1140
GCCAGCCTTC TTCAGAGACT GAACTTTCTG GCAATAAGCA AGAACAAGAA AGGAAAGATA	1200
AGCAAGAAGA AAAAATTCCA AGAGATTACT ATGCACGAGA TTTGGAAAAT GTCGAAACAG	1260



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TGATAGAAAA	AGAAGATGTT	GAAACCAATG	CTTCAAATGG	TCAGAGAGTT	GATTTATCAA	1320
GTGAACTAGA	TAAACTAAAG	AAACTTGAAA	ACGCAACAGT	TCACATGGAG	TTTAAGCCAG	1380
ATGCCAAGGC	CCCAGCATT	TATAATCTCT	TTTCTGTGTC	AAGTGCTACT	AAAAAAGATG	1440
AGTACTTCAC	TATGGCAGTT	TACAATAATA	CTGCTACTCT	AGAGGGGCGT	GGTTCGGATG	1500
GGAAACAGTT	TTACAATAAT	TACAACGATG	CACCCTTAAA	AGTTAAACCA	GGTCACTGGA	1560
ATTCTGTGAC	TTTCACAGTT	GAAAAACCGA	CAGCAGAACT	ACCTAAAGGC	CGAGTGCGCC	1620
TCTACGTAAA	CGGGGTATTA	TCTCGAACAA	GTCTGAGATC	TGGCAATTTC	ATTAAAGATA	1680
TGCCAGATGT	AACGCATGTG	CAAATCGGAG	CAACCAAGCG	TGCCAACAAAT	ACGGTTTGGG	1740
GGTCAAATCT	ACAGATTCGG	AATCTCACTG	TGTATAATCG	TGCTTTAACA	CCAGAAGAGG	1800
TACAAAAACG	TAGTCAACTT	TTTAAACGCT	CAGATTTAGA	AAAAAACTA	CCTGAAGGAG	1860
CGGCTTTAAC	AGAGAAAACG	GACATATTCG	AAAGCGGGCG	TAACGGTAAC	CCAAATAAAG	1920
ATGGAATCAA	GAGTTATCGT	ATTCCAGCAC	TTCTCAAGAC	AGATAAAGGA	ACTTTGATCG	1980
CAGGTGCAGA	TGAACGCCGT	CTCCATTCGA	GTGACTGGGG	TGATATCGGT	ATGGTCATCA	2040
GACGTAGTGA	AGATAATGGT	AAACTTGGG	GTGACCGAGT	AACCATTACC	AACTTACGTG	2100
ACAATCCAAA	AGCTTCTGAC	CCATCGATCG	GTTCAACAGT	GAATATCGAT	ATGGTGTTGG	2160
TTCAAGATCC	TGAAACCAAA	CGAATCTTTT	CTATCTATGA	CATGTTCCCA	GAAGGGAAGG	2220
GAATCTTTGG	AATGTCTTCA	CAAAAAGAAG	AAGCCTACAA	AAAAATCGAT	GGAAAAACCT	2280
ATCAAATCCT	CTACCGTGAA	GGAGAAAAGG	GAGCTTATAC	CATTCGAGAA	AATGGTACTG	2340
TCTATACACC	AGATGGTAAG	GCGACAGACT	ATCGCGTTGT	TGTAGATCCT	GTAAACCAG	2400
CCTATAGCGA	CAAGGGTGAT	CTATACAAGG	GTGACCAATT	ACTAGGAAAT	ATCTACTTCA	2460
CAACAAACAA	AACTTCTCCA	TTTAGAATTG	CCAAGGATAG	CTATCTATGG	ATGTCCTACA	2520
GTGATGACGA	CGGGAAGACA	TGGTCAGCTC	CTCAAGATAT	TACTCCGATG	GTCAAAGCCG	2580
ATTGGATGAA	ATTCTTGGGT	GTAGGTCCTG	GAACAGGAAT	TGTACTTCGG	AATGGGCCTC	2640
ACAAGGGACG	GATTTTGATA	CCGGTTTATA	CGACTAATAA	TGTATCTCAC	TTAGATGGCT	2700
CGCAATCTTC	TCGTGTCATC	TATTCAGATG	ATCATGGAAA	AACTTGGCAT	GCTGGAGAAG	2760
CGGTCAACGA	TAACCGTCAG	GTAGACGGTC	AAAAGATCCA	CTCTTCTACG	ATGAACAATA	2820
GACGTGCGCA	AAATACAGAA	TCAACGGTGG	TACAATAAA	CAATGGAGAT	GTAAACTCT	2880
TTATGCGTGG	TTTGACTGGA	GATCTTCAGG	TTGCTACAAG	TAAAGACGGA	GGAGTGACTT	2940
GGGAGAAGGA	TATCAAACGT	TATCCACAGG	TTAAAGATGT	CTATGTTCAA	ATGTCTGCTA	3000

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TCCATACGAT GCACGAAGGA AAAGAATACA TCATCCTCAG TAATGCAGGT GGACCGAAAC	3060
GTGAAAATGG GATGGTCCAC TTGGCACGTG TCGAAGAAAA TGGTGAGTTG ACTTGCTCA	3120
AACACAATCC AATTCAAAA GGAGAGTTTG CCTATAATTC GCTCCAAGAA TTAGGAAATG	3180
GGGAGTATGG CATCTTGTAT GAACATACTG AAAAAGGACA AAATGCCTAT ACCCTATCAT	3240
TTAGAAAATT TAATTGGGAA TTTTGTAGCA AAAATCTGAT TTCTCCTACC GAAGCGAACT	3300
AGAGAGATGG GCAAAGGAGA GATGGGCAAA GGAGTTATTG GCTTGGAGTT CGACTCAGAA	3360
GTATTGGTCA ACAAGGCTCC AACCCTTCAA TTGGCAAATG GTAAAACAGC GACTTTCCTA	3420
ACCCAGTATG ATAGCAAGAC CTTGTGTGTTT GCAGTAGATA AGGAAGATAT CGGACAGGAA	3480
ATTATTTGGTA TAGCTAAAGG AAGCATCGAA AGTATGCATA ATCTTCCTGT AAATCTAGCA	3540
GGTGCCAGAG TTCCTGGCGG AGTAAATGGT AGCAAAGCAG CGGTGCATGA AGTTCCAGAA	3600
TTTACAGGGG GAGTTAATGG TACAGAGCCA GCTGTTCATG AAATCGCAGA GTATAAGGGA	3660
TCTGATTTCG CTTGTAAGTCT TACTACAAAA AAAGATTATA CTTACAAAGC TCCTCTTGCT	3720
CAGCAGGCAC TTCCTGAAAC AGGAAACAAG GAGAGTGACC TCCTAGCTTC ACTAGGACTA	3780
ACAGCTTTCT TCCTTGGTCT GTTTACGCTA GGGAAAAAGA GAGAACAATA AGAGAAGAAT	3840
TCTAAACATT TGATTTTGTA AAAATGGCTC TTTGTCAACT GTAGTGGGTT GAAGTCAGCT	3900
AAGCTCGAGA AAGGACAAAT TTTGTCCTTT CTTTTTTGAT ATTCAGAGCG ATAAAAATCC	3960
GTTTTTTGAA GTTTTCAAAG TTCCGAAAAC CAAAGGCATT GCGCTTGATA AGTTTGATGA	4020
GATTATTGGT CGCTTCCAAT TTGGCGTTAG AATAGTGTAG TTGAAGGGCG TTGACGATTT	4080
TCTCTTTGTC CTTTAGAAAG GTTTTAAAGA CAGTCTGAAA AAGAGGATGA ACCTGCTTTA	4140
GATTGTCTC AATGAGTCCG AAAAATTTCT CCGGTCCTT ATTCTGAAAG TGAAACAGCA	4200
AGAGTTGATA GAGCTGATAG TGATGTTTCA AGTCTTGTGA ATAGCTCAAA AGCTTGTTTA	4260
AAATCTCTTT ATTGGTTAAA TGCATACGAA AAGTAGGGCG ATAAAAATGT TTATCGCTGA	4320
GTTTACG	4327

(2) INFORMATION FOR SEQ ID NO: 118:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 3521 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 118:

CTCTGGCCCT GCCACTCCAA CGTTTGTGCA GGGTGCTTTT TTCATAAAGG AGTTCTTATG	60
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843

TTAGATATCA AACGTATTCG TACAGATTTT GAAGCTGTCG CAGAAAAATT AGCTACACGT	120
GGTGTAGATG CTGCTGTCTT GAATGAAATG AAAGAAATCG ATGCTAAACG TCGTAACATC	180
TTGGTCAAGG TTGAACTCT CAAAGCAGAA CGTAACACAG TTTCTGCTGA GATTGCCCAA	240
GCTAAGCGCA ACAAGGAAAA TACAGATGAC AAGATTGCTG CCATGCAAAA TCTATCTGCT	300
GAGGTTAAAG CCTTGGATGC TGAATTGGCA GAAATCGATG CTAAATTGAC AGAATTTACA	360
ACGACTCTTC CAAATATCCC AGCTGACAGC GTTCCTGTTG GGGCTGACGA AGACGACAAT	420
GTGGAAGTTC GCCGTTGGGG TACTCCACGC GAGTTTGACT TCGAACCTAA AGCTCACTGG	480
GATCTCGGTG AAGACCTTGG TATCCTTGAC TGGGAACGCG GTGGTAAGGT AACAGGCGCT	540
CGCTTCCTCT TCTATAAAGG CCTCGGTGCT CGTTTGGAAC GTGCTATCTA CAACTTTATG	600
TTGGATGAAC ATGGAAGA AGGCTATACT GAAGTCATCA CACCTTACAT AGTCAACCAT	660
GATTCTATGT TTGGTACTGG TCAGTATCCA AAATTTAAGG AAGATACTTT TGAATCAGC	720
GATACCAACT TTGTCTTGAT TCCAACGTCT GAAGTTCCTC TGACAACTA CTACCGTGAT	780
GAAATCTTAG ACGGCAAGA TCTTCCAATC TACTTCACTG CCATGAGTCC GTCATTCCGT	840
TCTGAGGCTG GTTCTGCCGG TCGTGATACG CGTGGCTTGA TCCGTTTGCA CCAATCCAC	900
AAGGTTGAAA TGGTCAAATT TGCCAAACCA GAAGAATCTT ACGAAGAATT GGAAAAATG	960
ACAGCCAACG CTGAAAACAT TCTTCAAAAA CTCAACCTTC CATAACCGTG CGTTGCTCTC	1020
TCTACTGGAG ATATGGGCTT CTCAGCTGCG AAGACTTACG ACTTGGAGT GTGGATTCCA	1080
GCACAAAACA ATTACCGTGA AATCTCAAGC TGTTCAAACA CAGAAGATT CCAAGCCGT	1140
CGTGCCCAA TCCGTTACCG TGATGAAGCA GATGGAAGG TGAACTCCT TCATACCTTG	1200
AACGGTTCTG GACTTGACGT TGGACGTACA GTGGCTGCAA TTCTTGAAAA TTACCAAAAT	1260
GAAGATGGTT CTGTGACCAT CCCAGAAGCA CTTCGTCCAT ACATGGGTGG AGCTGAAGTC	1320
ATCAAACCAT AAAAAATAAG GTTTAGCTAT TTCTAGCTAG ACCTTTTTTC GTAACCAAT	1380
CAGATAAGCA CCTAGTACAA AGAATAAAAT AGTTAGGCAT ATAATGGTTT CAGCCAATAC	1440
CAGGTAATCC AGAAATGGAA GTTTCAAAAT TCCCTGAGCC ATCTTGAGCG AGGTCGCTGT	1500
GATAATGGTT GGGAAGGTGA GGGCTGAGAA GGCTGGTTGA AAACCTTGTT TTAAAATGTT	1560
GGGCAGACGA GTTAAACAA AGAAAAAGAA GGATTGAGAA GCCAAAATCA TGACAATCAA	1620
GACCCAAGTC GGCAGGCTGG TTCCTCCTAC TCGAACTAGA GAAGCCAAGA GTAGAGAGAA	1680
AGGAGCACAG TAGATTCCTT CTTGTCCAAG CAAGGCTAGT GGGAGTGGAT GTTTCTTTAA	1740
ATCGCTATAA ATAAGGGGAT AGAGATAGAA GGTCAAGAGA AAACCAAAAC TCAAGGTCGC	1800

844

ATAGGCAATT TCGATAATAC CTACCAGAGG ATAGGTCAAG GCAGCCACTG CTATCCCCAC	1860
ATAGAGAACC GTCCAGCTTG GAGTGGCATG AACCCCTCCGC CCTGGACAAG CAAACTTGAT	1920
GGTAAAACCA GCAATCAAGG TCAAATCCAA GAGAAATGAA AACCACCAA TCCCTTGTGC	1980
TACCAAAGGA AGATAAGAGA ATACGCGAAA GACATAGGTC GATAAAATCA TCCCAGCCAT	2040
AGGAAAGGTT GCCATTCTCTG ACAAAGAGG GGGCTTGGTC AATTCTTGCT TGGTTTCTTT	2100
CCAATTAAAG AGATGCAGAA TTAGAAAGTA AATCCATAAA ACCAAACCAA TCAGACTAAA	2160
AAGATGGGAT AGAACC GGCA ACGTATCTAA AATAAGATTT CCAGCTCTG CCAAACCTAG	2220
CAAACAACCT GAAAATACTA AGGGGAGTTT TTTCATCCTA ACCTCCAATA ATCATGTTAG	2280
TTTCAGTATA ACATAAAAGC GCTTAAATGA GGATTTAAAA AAACGAGTCC GCTTATTCTA	2340
GACTTCATTT TACTCAGATA TGAATTAGGC ATAAGGTGTC AATTCTGGAT TAATTGGTGT	2400
ATTAGCTAAG TTGTTGGCAT AGTTACAGAG GATTGCTAGG CTGACACCAA AAACCACATC	2460
CAAGGCATTT TGTGAGTGT AGCCAGCTTC TAAAACTCA GACAAGGCTT CATCTCCTAC	2520
ACGACCCTTG GTATTGATAA CTGCCAAGGT AAACCTAGCT AGGGTATCCA ATTTAGGATC	2580
TGTTTCAATT GGAGTACGAT TGCGAAGAGC TTGAATCAAG TCATCATTC TCTGGATTG	2640
TTTGATGGAA AAGGCTGTGT GACCTGCGAC ACAGAAGGCA CAACCATTTG TCACGGCTGC	2700
CGTGATTTGC ACCACTTCAC GCTCAACGGG TGTCAGGCTG TTGCGACGGT GGATAGATGA	2760
GACAATTTGG TAGGCTTCTA AAACAGTCGG GGCATTGGCC AAGAGACCGA TTAGGTTGGG	2820
AATATAGCCA TTGTTGTCTT TTTCTACTGT TTCAAGAATT TCTTTCACTT CTGCTGGTGC	2880
TGACTCTACT GTATGGATAG TAAATGTTGT CATAAGATAC CTCTTTCTT ATTATTGACA	2940
CTAATATTAT TGGAAAATCT TATAAAATCC TGATTCCCTAA GTTTATCTAA GATAAAGCTT	3000
TATTCTCTCA TAAGATTTTC GTTGTTATAT TAGTTTATCA CACTTCCAAT CACTTGATA	3060
ATATATATTA TATATCAGGC TGATAAAAAT TATTTATAGG CAAAAAATC ACACGAGCTG	3120
TGTGATTCCA TTATTTGTCA AAATACTTTT TAGTTTCAGC AATAACGACT GGCGACAAGA	3180
CCAAGAGGGC AATCAAGTTT GGCAGAGCCA TCAAGGCGTT AACGATATCT GCGATAATCC	3240
AGACCATATC CAACTCGATA AATCCTCCTA ACAAGACCAT GAGCACAAAA ACCACACGGT	3300
AGAGCCAGAT AAAGCGAACC CCAAAGAGGA ACTCAAACA GCGTTCCTCCG TAATAGTTCC	3360
AACCTAGAAT CGTTGTAAAG GCAAAAAGTA CAAGGAAGAT GGTCAAGAGA GCAGGCCCAA	3420
AGTGTGAAAA GTTTGTTGAG AAAGCTGACT GAGTCAAGGC AACCCCATTC AAGTCACCGC	3480
TCCAAACTCC AGTTACCAAG ATGGTCAAAC CAGTTAGAGT A	3521

(2) INFORMATION FOR SEQ ID NO: 119:

845

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1968 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 119:

AACCTGGGCA AGCAAGCTAA AAGCAATGGG ACCTGGAATC CTAATGGCAA CTGCCGCTGT	60
TGGAGGTTCC CACATTGTAT CCTCAACTCA AGCTGGCGGT TCTTACGGTT GGTCTCTACT	120
TCTCTTGGTC ATCTTAGCCA ATGTCTTTAA ATATCCATTT TTCCGTTTGT GTGCTGAATA	180
CACAGCTGAT ACTGGAAAGA CTTTGGTTGA AGGTTATGCC GAAAAAGGAA AACTCTATCT	240
CTGGATTTTC TTTATCCTCA ATGTCTTTTC GGCTATGGTC AACACGGCTG GTGTTGCCAT	300
TCTGTGCTCA GCTATCATCG CCAGTGCCTT CCCAATGATT GGACTTAGCA TTACTCAGTG	360
GTCCCTCATT CTCGTTGCAA TCATTTGGGC TATGCTACTC TTTGGAGGCT ACAAACTTTT	420
AGACGGCATG GTCAAATGGA TTATGTCTGC CTTAACCATT GCGACTGTTC TTGCAGTTAT	480
CATTGCGGCG GTCAAGCATC CAGAATACAG TTCTGATTTT GTCGAGAAGA CACCTTGGCA	540
AATGGCAGCT CTGCCCTTCA TCGTCTCCCT CCTAGGATGG ATGCCGGCTC CTATTGAAAT	600
TTCAGCCATC AATTCACTTT GGTGAGCTGA AAAGAGAAAG ACCGTCAACT TTAACACAGA	660
AGACGCTCTG TTTGACTTTA AACTGGTTA TATTGGAACA GCTATCCTAG CCGTCTTCTT	720
TGTGGCACTG GGAGCACTGA TTCAGTATCC TACAGGGCAG GCGGTTGAAG CTGCTTCAGC	780
CAAATACATC TCTCAATTCG TGGGCATGTA TGCCTCTGTT CTTGGCGAAT GGTCCCGTTA	840
CTTGATTACC TTTATTGCCT TCCTCTGTAT CTTTGGGAACA GTTATAACTG TTATCGATTG	900
CTATCTCTCG GTTAATCAGG AATCTCTCCG ACTGCTAATC AGTCAAAAAG AGGACAATCG	960
TAAATCTTTG AACATCTGGA TGACCATCAC TGCTATCATC GGTATCGTCA TTATCAAGTT	1020
CTTCGCTGGT CAGGTTTCAA CCATGCTCCG CTTTGCCATG ATTGGCTCTT TCCTGACAAC	1080
ACCTTTCTTT GCTCTTTTGA ATTACGCCTT GGTAACGCGT GAAAACAAAA ATCTTCCTTC	1140
TTGGCTCAAA CACCTTGCCA TTGCGGGATT GATTTTCCTC TTTGCTTCGC CATCTTCTTT	1200
ATCTACGCAC TCGCAATCGG AAAAGCAGGG TAAGGGACAA GCGCGAGATG AAGATAAGGT	1260
TTCATTTCAA GAGAAAATTC AGCAAATATT TCTATGATAA AAAGCATAAG AACAAGGTTT	1320
TGAAGACCTG AACTTATGCT TTTTACGTT CTTAAAGACT GTTTATACTC AAAAAACAGT	1380
TGAACAACCT CAACCACCTC TTATAAGAAC TTTATACTAT TCGAGAATCT CTTCAAACCA	1440

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CGTCAGCTCT ATCTGCAACC TCAAAGCTGT GCTTTGAGCA ACCTGCGACT AGCTTCCTAG	1500
TTTGCTCTTT GATTTTCATT GAGTATTAAT TCTCCTTTC CAACTCATAC AAATCTGCGA	1560
TAATAGCTGC GACATGTTTG ATATCTTCCA GCATGCCTCG CATTTCAAAG TCAGCCAATA	1620
CAGGGAAGCC AAAGCGTTGA CTGTATTGCT TGGCTGTTAG GCAGTATTGG TTATTAAAGT	1680
TACGATTTC TGACCCAACC ACACCAAAAC ACTTACTAGC ATTGTTACCA TAGGCAATAA	1740
AATCTCCAC CGGTGTCGTC AAAATCTCAA CATCTCCGTT ATCCACGCCA TTTCCACCTT	1800
CGAGATAGGT CGGCAAAAAA GCGACATAGG GATGGTCCAT TTCATAGAAA TTTTGCCTT	1860
CCTTGACCAA ATCCTTGATA TGAATCTTTT GAACCTCAAT CCCTTTGTAC TGGGACAAGA	1920
GATAGTCTTT CAAGCGCGTC ACAAACCTTT CAGTGTGGC ACTCAAGG	1968

## (2) INFORMATION FOR SEQ ID NO: 120:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 7172 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 120:

CCGCATTTTT TATCACTAGA CTCGAGACAT CTTTTGAGTG GCTCTTGCTC TCTGGTTTAA	60
TTTTCTTCCT TGCTCAAGGA CTCCTGCTAT TTCTCTGGT CGTCCGACTC AAACATCAAT	120
TCGCTGAGAT TTATCCTCAA ATCAATAAAA AGATTGCTT CTAATATTTA GGGGTTCTCA	180
CCATTGATTT TCTATTTTTT GTTCTCTTAG CCTTCATTAG TTCTCAGCGT TTTTCATCTC	240
TTATGCCAAT CATCACTGCT TGCCATTCTA CTTTTTATTA TATGACAGCT GACTACCTAA	300
GAGAAACTA TCCAGACTTT TACGACAAAC ACATCTCTTT ATGGGAGTGT CTCTAAAGAA	360
AAGGAGGTTT TAGCATGAAA AAAATCATCT TCATCAAAAC CATTCAACTC CTGTTCATTG	420
ATGGAATCAT GCTGGCATT TTAGACATTA AAAGGGGGCT TACTTGGGAC TGGATTTTGA	480
TTTATAGCGG TTGGCTCATT TTCTTTCATC CTGTGCTATT GACCTATCTT TCAAACCAAC	540
TTTGTGACCA CTTTAGTTAA CTCTATTCCC AGATTAGACC GAGATTCTGG CGTTTGTCTT	600
TACAAATTCT CCTATGGGAT AGCCTGATGA TTCTCTCCTT GGTGCTCTTA AGTGATATTC	660
CACTTTTCCT TCAGGGAAC CTCCTCATCC TAGGACATCT CATCCCTTCC TATCGCATCT	720
GCCAAAGCCT GAAAAGAGAC TTCCCCCAAG CATATCAAGA ACCGATTCTT TTTTGGAGTA	780
TTTTATGATA GATGAGAAAG ACCAAGCCGA CTGGGCTTGG TCTTCTTAT CTCTTTTATG	840
TATCTAGGAT AATGGTAACA GGTCCATTAT TAACCAGCTC AACCTGCATA TCTGCTCCAA	900

847

AGATGCCTGT CTGAACGGGC ACTTCTTGCG CTAATTTTGT ATTGAAAGCA TCATAGAAGT	960
CTGATGCCAT ATCAGGTTTA GCTGCCCCTG TAAAGgCTGG ACGATTGCCT CTCCTAGTAT	1020
CCGCAAAGAG GGTAACCTGA GAAATAGAGA GGATTTCTCC TTCAATATCT TTGACAGACA	1080
GGTTCATCTT GCCTTCTGCG TCTGAAAAAA TCCGCATATT GACCAGTTT CTCACAGCAT	1140
AGTCCAAATC TTCCTCTTGG TCCTCTGGTC CAACACCAAC CAGCAATAAA AGTCCCTGAT	1200
TGATTTTTC CTGAATCTGG CCTTCTATAC TCACTTGGGC TTTTTTAACC CGTTGGATAA	1260
TGATTTTCAT AATAGCCTTT CTAGTAAGAG CTAGGACAAC TAGCCGTTGG TCCGTTTGAC	1320
AGAGTAAACT TCTGGCACAC TCTTAATTTT ATCGACAACC GTGGTCAGTG TAGAGAGGTT	1380
GGCAATACCG AAGgACACAT GGATATTAGC AACTTCATA TCCTTGGTTG GTTGGGCATT	1440
GACCGTTGAA ATATTCTTGG TTGTATTTGA AAGAACTTGC AGTACATCGT TCAACAGTCC	1500
TGTACGGTTG AGACCGTAGA TATCGATATG GGCCATATAC TCCTTATTTG AGCTAGGGTA	1560
CTGGTCTTCC CATTCACAT CAAGGAGACG TTGCTCGTAG TTTTCTTGGG CACGCAGGT	1620
CATACAGTCC ACACGGTGAA TAGCCACACC ACGACCCTG GTAATGTAGC CAACAATATC	1680
GTCACCAGGC ACGGGGTAC AACACTTAGC AATCCGCACT AGGAGACCAG AAGCACCTTC	1740
AATAACCACT CCCCCCTCAT GCTTGACCTT GAGGGTTTCT TTATTTTCAA CCTTGACCTC	1800
GCCACCTTTG ACAAGCTCCT CTGCCTCAGC TTGGCCTTG GCACGCTCTT CCTCACGGCG	1860
TTCTTTTCA GTCAGACGGT TAAAGACGGT AATCGACCG ATTTCCCCAA AACCAATGGC	1920
CGCAAAGAGG GAGTCTTCTG TCTTGTAAC TGTCTTTTGC AGAACTTGAT CCATGTGGCG	1980
CTTGTCATA AATTTATTTG CCACATAGCC ATTTTCTTGG AACTGAGCCA TCAGCATCTC	2040
ACGACCCTTG TTGACAGACA ATTCTTATC TTGGTTTTTA AAGAACTGGC GAATCTTATT	2100
GCGGCCTTG CTAGTCTTGA CCATATTGAG CCAGTCACGG CTAGGTCCAA AGGAGTTCGG	2160
GTTGGCGATA ATTTCAACCT GATCCCCTGT CTTTAACTTG GTTGTCACTG GAACCATGCG	2220
GCCATTGACC TTGGCACCAG TGCTTTTTC ACCGACCTTG GTATGGATTT CGTAGGCAA	2280
ATCAATCGGT CCTGAATCTT TGGGAAGGGA ACGGACAGCT CCATCTGGGG TAAAAACGTA	2340
AATCTCCTCA GCCAAATAGT TTTCTTAAC AGAGTCCACA AATTCCTTAG CATCATCAGC	2400
CTGGTCTTGG AGCTCCATCA TCTCCTTGAT CCAGTTCATT CCAATAGCTG ATTCCTTGCT	2460
GTAACTTGC CCCTTTATAC CTTTCTTATA AGCCCAGTGA GCCGCAACCC CGTACTCAGC	2520
CACCTCGTGC ATTTCTTGG TTCGAATCTG GAATTCAATC GGCCCTTTTG GTCCATAAAC	2580
AGTCGTATGG ATAGACTGAT AACCATTGGC CTGCGGTTG GCGATATAGT CTTTGAAGCG	2640

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ACCTGGCATC	GGTTTCCAAA	ATTCATGCAC	GTAACCAAGC	ATGGCATAAA	CATCACTTTG	2700
GGTATCTAAA	ATACAACGAA	TAGCAATCAG	ATCATAGATT	TCCTCAAACC	GTTTTCTCTT	2760
GTCCTGCATT	TTGCGGAAAA	TTGAGTAAAT	ATGCTTGGGA	CGACCATAAA	TCTTCCCTTT	2820
CAAGTGACGT	TCTGTCGTAT	ACTCCTCTAA	TTTTGTGACT	ACCTCATCCA	CCAAGGCCTC	2880
ACGCTCCCTG	CGCTTTTCCT	TCATCATATG	GGTAATCTTG	TAAAACTCCG	TTGGATTGAG	2940
ATAACGGAAA	GACAAGTCTT	CTAATTCCCA	TTTGACACTG	GAAATCCCCA	AACGATGGGC	3000
AAGCGGGGCA	TAGATTTCCA	TGGTTTCTTT	GGAAATACGC	TCCTGCTTGT	CTTTTCGAAG	3060
ATGTTTCAGG	GTCCGCATAT	TGTGCAAGCG	GTCAGACAGT	TTGACCAAAA	TAACGCGGAT	3120
GTCCTCAGAC	ATGGCCATGA	GCATCTTGCG	ATGATTTTCC	GCTAATTGCT	CCTCGATCGA	3180
TTTGTACTCG	ACCTTGCCAA	GCTTGGTAAC	TCCGTCAACA	ATCATCCGCA	CATCAGGACC	3240
AAACTCTCTT	TCCAAATCGT	CCAAAGTCGC	ATCTGTATCT	TCCACCACAT	CATGCAAGAA	3300
TCCACAAGCT	ACTGTTACAG	CATCCAGCTT	TAGCTTAGCT	AAAATACCTG	CCACTTGGAT	3360
AGGGTGAATG	ATATAAGGCT	CGCCTGATTT	GCGATATTGA	CCACTGTGGC	ATTCAACAGC	3420
ATAGACCAAG	GCCTTATGGA	CAAAATGAAC	ATCCTCTTCC	GTAAATATAT	CTTTGGTTAA	3480
AGCGACAAC	TCTTCGCCTG	TTAAATTAC	TTCTTTCGGC	ATCTCTACTC	TCCAATTCTT	3540
CCTACCATTT	TATCACTTTT	TTAAGAATAT	GAAAACTAGA	TTGGAACAGA	ATAAGAAAAA	3600
AATAATTCAA	AATTGCTTGA	TAATTCTGAA	TTATTGGTCC	GTAATATACT	ACGAAGTTAG	3660
ATTTTAAACT	TAGGTGATAG	AAGGAGAGAT	AGAAGAACGG	AAACCATATT	GTAACCCAAA	3720
GACTTTCTGA	CTTCCCCAAT	TCCATTGAAG	ATACGAAAGA	TAAACGGTGG	AACTCGTATC	3780
ACATACACTG	GTACCTTGAC	TGGATTTTGG	AATTAATACT	AAATGAAAAT	CAAAGAGCAA	3840
ACTAGGAAAC	TAGCCGCAGG	TTACTCAAAG	CACCGCTTTG	AGGTTGCAGA	TAAAGTTGAC	3900
GCGGTTTGAA	GAGATTTTGG	AAGAGTATAA	AAATCCTCAA	GATACTTTCT	TCTATCCTTT	3960
AGTTTATAAG	GAGAATACCT	ATGAAAAAAA	CTGCTATTTC	TATCTTTGCT	CTCCTAATGT	4020
TAGGAGTTTG	CTGCCTGTTC	CTATTAGCC	AGCAAAGCTA	TAAAAAACAG	TCGTTCAATA	4080
CTATGCTAAC	GACCAGAACC	TGCCAGTAG	GATAACTTAT	AGTGAATATA	GCGACAAATG	4140
AGAAGCCAAC	TACGGTAGCA	CTCTAAACAT	CACGTCTATC	AAACAAGCTA	ATGACGGAGT	4200
TTATGCAACC	TATGAAGGGC	AATTGACACC	TTTCCAATAT	TGATAAATG	ATAACCAGCC	4260
TGTCTTCATC	TAGTCATGCT	GGTTTTTAAG	TTCATTTTAA	ATCCTTACCT	ATTCTCCCTA	4320
ACTGTGCTAT	ACTTAATTTA	TACTCAATGA	AAATCAAAGA	GCAAACCTAGA	AAGCTAGCCG	4380
CAGGCTGTTC	AAAGCACTGC	TTTGAGGTTG	CAGATAAAGT	TGACGCGGTT	TGAAGAGATT	4440



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TTCGAAGAGT	ATTAGTACAT	TCTTTGAGAT	TGGAGCTAGT	ATGAAAATCC	ATAAAACCGT	4500
GAATCCTGTT	GCCTATGAAA	ATACCTATTA	TCTAGAAGGC	GAAAAGCACC	TCATCGTCGT	4560
CGATCCTGGT	AGTCATTGGG	AAGCCATTCT	TCAGACAATC	GAGAAGATCA	ACAAACCGAT	4620
CTGTGCTATT	CTCTTGACCC	ACGCCCATTA	TGACCATATC	ATGAGTCTGG	ACTTGGTTCG	4680
CGAGACGTTT	GGCAATCCTC	CTGTCTATAT	CGCAGAGAGC	GAAGCCAGCT	GGCTCTACAC	4740
TCCTGTTCGAT	AATCTCTCCG	GTCTCCCTCG	CCACGATGAT	ATGGCAGATG	TGGTCACAAA	4800
ACCTGCAGAA	CACACCTTTG	TCTTTCACGA	AGAATACCAA	CTAGAGGAAT	TTCGTTTTAA	4860
GGTTCTACCG	ACCCAGGGC	ACTCTATCGG	TGGTGTTCCT	CTAGTCTTTC	CTGATGCTCA	4920
TCTAGTCTTG	ACGGGAGATG	CTCTATTCCG	CGAACTATC	GGACGGACCG	ACCTTCCGAC	4980
TGGTAGCATG	GAGCAACTCC	TTCATAGTAT	CCAGACCCAA	CTCTTCACCC	TACCAAACCTA	5040
CGATGTCTAT	CCAGGACATG	GTCCAGCTAC	TACTATCGCT	CACGAAAAGG	CCTTCAATCC	5100
CTTTTCTTAG	CAAGATGATG	ACAATCGAAA	TTTAAAGTAA	CTATCCAGCA	AATCTTTCTA	5160
TTACAAAAGG	CATCCTATCA	AGGTTTTCAC	ACATGATTGG	ATGCCTTTTT	TCTGATGACT	5220
AGATTTTTTG	CATTACCAA	TAATCACGCG	CTCCTCTGGT	GAACGCCACA	TTCCGTCTCC	5280
TTCTTTGACA	TCATAGGTTG	TAAAGAAATC	GTCTGAAGTT	GGTACTTGCA	CATTGACACG	5340
GAGTTTGGCT	GGTGCCTGCA	CATCGACGCT	AGCCAAAAGT	TTCATAAATT	CTGGTCGACC	5400
TTTCATGCGC	CAGATGCGAC	CGAAGTTGTA	GAAGAACTCT	TCTGCTGAGA	AGTCTGCTTC	5460
TCTCTTAGCT	GCTTCAAGCG	CTGCTGCGAT	TCCTCCCAAG	TCAGCCACGT	TTTCTGATAC	5520
AGTCAATTTA	CCGTTAATGG	TTGCTCCATA	AGAATCCTGT	CCATCAAATT	GGTCAATGAC	5580
TTTTTGTGTT	TTCTCCTTGA	AGGCAGCATA	GTGCTCTCT	GTCCACCAAT	CCTTGAGGCT	5640
ACCATTTTTC	TCAAAGGAAG	CCCCGTTAGT	ATCAAAGGCG	TGGGAAATTT	CATGGGCAAT	5700
CACTGCCCCA	ATACCACCGT	AGTTAGCAGA	AGATGACTGA	TGCAAGTCAT	AGAAAGGCGC	5760
CTGTAAAATG	GCCGCTGGAA	AGACAATCAG	GTCTTCTTGA	GGATTGTAGT	AGGCATTGAC	5820
CATATGAGCA	GGCATGCCCC	ATTCCCTTATA	ATCTACAGGC	TGGTTCCACT	TACTCCAACCT	5880
GTGCTTGATT	TCCACACGCG	CAAAGGCTAG	AGCATTTCTCA	AAAAGACTGG	CAGTTTCATT	5940
CACTACCTTA	TCCTTGTAAC	GTGCAGGCAA	TTCTTCTGGA	TAGCCAATAT	AAGGTTTGAT	6000
CACATTGAGC	TTACGATAG	CCTGTTTACA	GGTTTCTGGA	GTGAGCCAGT	CATTCTTAAG	6060
CAGACGCTCC	TTATAAACAT	CAATCATGGT	TGCCACTTTT	TTCTCCACAT	CCGCCTTGGC	6120
TTCTGGAGAG	AACCTCTCAC	GGGCGTACCA	AAGACCCAGG	GCTTGCTTGA	AAGGTTCTTG	6180

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TGCTAGATGA TAAGCTGCTT TGACCTTATC TTTTGCCTCT GGAAGTCCAG AAAGGGCACG	6240
GCTGTAGGCA CCAGACAAA CACGGATATC CTCTGTTAAA TAGCTGGTTG AAAGATTGAC	6300
AACACTCAAA ATCAAGGTG CTTTAAGGAG AGACCAGGCT TCCTCACTGT AGAATTGCTC	6360
TGCTGCTTGC CAGAAACGTT CCTCGTCTAC AATAACCTTG TCTGGTAATT GCCCAATAAC	6420
TGCTTTGAAG AAGTCATCCA AAGGTAGGGC AGGCGCGAAT TTCTTGAAAT CTTCGTAAGA	6480
ATATGGATGA TAGAGTTTAG CATATTCTGA ACTTCTTCA TTAGAGAGCA CCACTGCCGC	6540
AACTCGGCGG TCCAATTCAA GTCTTTTTC TAGCAAGTCT TCAATTTCTT CATCAGAGAA	6600
ATCATAAGCC TTGAGGAGAT TTGCGCTGCT TTCTTTCCAA AGAGTCAAGA GCTCTTCGCG	6660
CTGAGGATGT TCTTCTGCAT AGTAGGTCGT ATCTGGCAAG ATTGTGCTTG GAGCGCTAGC	6720
CCATAGAACA TTGATTCTAG CATCCATAAA GTCTGGCGAT ACACCAAAAAG GAAGGAAGTT	6780
TGGTTTTCCT GCAAGCTCAA ACTCTGCTAG TTTAGCTGTA AAATCCGCAA AAGTCTCCAA	6840
TTCTTGGAAT TCTTTAAGGA GTGGTAAGAC AGGTGTGATA CCGTCAGCTT CTCTCTTGTC	6900
AAAATCACGA ACTAGGCGGT GGTATTTGAC AAAGTTTTC AAGATAGCAT CCTCAGGCAC	6960
TTCTTCACCT GCTAACCACT TGTCTGTTGT CGCCAGCATC AGGTCTTCAA TTTCTCTGTC	7020
TAAATCAACA AAACCTCCTG TTTGAGACTT ATCTGCTGGG ATTTGAGCTG TCTGTTGCCA	7080
TTCTCCATTG ATAGCATCAT AAAAATCATC TTGATAACGT GTCATCTTGT TCTCGCTTTC	7140
ATTTGTATTT GCATTTATCT TAACAAAAT CG	7172

(2) INFORMATION FOR SEQ ID NO: 121:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 4518 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 121:

CGGGAAGTTA TGCGATCTAG ACTTCGTTCC TGTACAGCTA CTTTCTCAGG TGGTCTTGTT	60
GTTTGTATGA GTTTGTTTAG AGAGGATCTT TCTATGTCTT TCTTCTTAT TTTTGTTTTA	120
TATGCTTTTC TGATTTCTTA TCTAATTAT GGTATTTCA GACTAAAAAG GAAATACCGA	180
GTAGATGAAT AGCAAGGTTT TAGGTCTTCA GATTGATTTT TAGCACTCTT GATAAAGAG	240
TGCTAATTTT TTGAGTTTTT GTCTTGACAT TCTCTTCTAA GGGTGTATAA TAGAATCATG	300
AGTTAGCACT TGGATGCATT GAGTGCTAAT TGATCAGACA GAGAGGAGTG ATGAGATGGT	360
TACAGAGCGT CAGCAGGATA TTTTAAATCT GATTATTGAC ATCTTTACCA AAACGCACGA	420

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ACCTGTCGGA	TCAAAAGCCT	TGCAAGAGTC	TATTAACTCT	AGCAGTGCAA	CCATTCGTAA	480
TGACATGGCG	GAAC TAGAAA	AACAAGGTT	GCTTGAGAAG	GCTCATACTT	CAAGTGGTCG	540
GATGCCAAGT	GTTGCTGGTT	TTCAGTACTA	TGTGAAACAC	TCACTGGATT	TTGACCGGCT	600
GGCTGAAAAT	GAGGTATATG	AGATTGTCAA	AGCCTTTGAT	CAGGAATTCT	TCAAATTGGA	660
GGATATTCTG	CAAGAGGCTG	CTAACTTACT	AACAGACCTG	AGTGGCTGTA	CGGTAGTGGC	720
ACTGGATGTT	GAGCCGAGCA	GGCAACGTTT	GACAGCCTTT	GATATCGTTG	TTTTGGGGCA	780
ACATACAGCC	TTGGCGGTAT	TTACCCTAGA	CGAGTCGCGA	ACGGTTACTA	GTCAGTTTCT	840
GATTCCAAGG	AACTTCTTGC	AGGAGGATTT	GCTGAAACTG	AAGAGCATCA	TTCAGGAACG	900
TTTCCTCGGT	CACACCGTTT	TAGATATTCA	CTACAAGATT	CGGACGGAGA	TTCCGCAGAT	960
TATCCAGCGT	TACTTTACAA	CAACGGATAA	TGTCATCGAT	CTCTTTGAAC	ACATCTTTAA	1020
GGAAATGTTT	AACGAAAACA	TTGTGATGGC	GGGCAAGGTC	CATCTCTTGA	ATTTTGCCAA	1080
TCTAGCAGCC	TATCAGTTCT	TTGACCAACC	GCAAAGGTG	GCCTTGGAGA	TTCGTGAGGG	1140
GTTGCGTGAG	GATCAGATGC	AAAATGTTTC	TGTTGCAGAC	GGTCAAGAGT	CCTGTTTAGC	1200
TGACCTAGCG	GTAATCAGTA	GTAAGTTCTT	CATTCTTAT	CGGGGAGTTG	GAATCTAGC	1260
CATTATCGGT	CCAGTTAATC	TGGATTACCA	ACAGCTAATC	AATCAAGTCA	ATGTGGTCAA	1320
CCGTGTTTTG	ACCATGAAGT	TGACAGATTT	TTACCGCTAC	CTCAGCAGTA	ATCATTACGA	1380
AGTACATTAA	GATTGAAATC	ATTAAAGGAG	GCGAACATGG	CCCAAGATAT	AAAAAATGAA	1440
GAAGTAGAAG	AAGTTCAAGA	AGAGGAAGTT	GTGAAAACAG	CTGAAGAAAC	AACTCCTGAA	1500
AAGTCTGAGT	TGGAAGTTGC	AAATGAACGT	GCAGATGAGT	TCGAAAACAA	ATATCTTCGC	1560
GCTCATGCAG	AAATGCAAAA	TATCCAACGC	CGTGCCAATG	AAGAACGTCA	AAACTTGCAA	1620
CGTTATCGTA	GCCAGGACTT	GGCAAAAGCA	ATCTTACCAT	CTCTTGACAA	CCTTGAGCGT	1680
GCACTTGCAAG	TTGAAGGTTT	GACAGATGAT	GTGAAGAAGG	GCTTGGGGAT	GGTGCAAGAA	1740
AGCTTGATTC	ACGCTTTGAA	AGAAGAAGGA	ATTGAAGAAA	TCGCAGCAGA	TGGCGAATTT	1800
GACCATAACT	ACCATATGGC	CATCCAAACT	CTCCAGCAG	ACGATGAACA	CCCAGTAGAT	1860
ACCATCGCTC	AAGTCTTTCA	AAAAGGCTAC	AAACTCCATG	ACCGCATCCT	ACGCCCAGCA	1920
ATGGTAGTGG	TGTATAACTA	AGATATAAAG	CCCGTAAAAA	GCTCGCAGTA	AAAATAGGAG	1980
ATTGACGAAG	TGTTGATGA	ACACAAGAAA	ATCTATCTTT	TTTACTCAGA	GCTTAGGGCG	2040
TGTTGATTC	GGCAATTCTG	ACGGTAGCTA	AAGCAACTCG	TCAGAAAACG	GCAATCGCTA	2100
TGGCGTTTGC	CTAGCTTCCT	TACTAACTCG	TCGTCGAAAT	AAAATCGATT	TCGACTCCTC	2160

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GTGTCGCAAT	TTACATAATA	GAAAACTTGT	CCGAAACGAC	AATAAACTAT	GAAGAAAGAT	2220
AAAATATGTT	TGGCTTTGTA	ATAGTGAGCG	AAGCGAACCA	AACACGATAC	TCTTCGCCGT	2280
GGCGCTATTT	GCGCAAATTT	TGAGACCTTA	GGCTCAAAGT	TTAGTCAAAG	AGATTGACGA	2340
AGTCAAGCTC	TGACGGCGTC	GCCACTGTCT	CCACTTAAGA	AGAGTATCAA	AAAGAAAAAT	2400
AGAAAAATTAA	CTAACAAAGGA	GAAAAACACA	TGTCTAAAAT	TATCGGTATT	GACTTAGGTA	2460
CAACAAACTC	AGCAGTTGCA	GTTCTTGAAG	GAAGTAAAG	CAAAATCATC	GCAAACCCAG	2520
AAGGAAACCG	CACAACTCCA	TCTGTAGTCT	CATTCAAAAA	CGGAGAAATC	ATCGTTGGTG	2580
ATGCTGCAAA	ACGTCAAGCA	GTTACAAACC	CAGATACAGT	TATCTCTATC	AAATCTAAGA	2640
TGGGAACTTC	TGAAAAAGTT	TCTGCAAATG	GAAAAGAATA	CACTCCACAA	GAAATCTCAG	2700
CTATGATCCT	TCAATACTTG	AAAGGCTACG	CTGAAGACTA	CCTTGGTGAG	AAAGTAACCA	2760
AAGCTGTTAT	CACAGTTCCG	GCTTACTTCA	ACGACGCTCA	ACGTCAAGCA	ACAAAAGACG	2820
CTGGTAAAT	TGCTGGTCTT	GAAGTAGAAC	GTATTGTTAA	CGAACCAACT	GCAGCAGCTC	2880
TTGCTTATGG	TTTGGACAAG	ACTGACAAAG	AAGAAAAAAT	CTTGGTATTT	GACCTTGGTG	2940
GTGGTACATT	CGACGTCTCT	ATCCTTGAAT	TGGGTGACGG	TGTCTTCGAC	GTATTGTCAA	3000
CTGCAGGGGA	CAACAACTT	GGTGGTGACG	ACTTTGACCA	AAAAATCATT	GACCACTTGG	3060
TAGCAGAATT	CAAGAAAGAA	AACGGTATCG	ACTTGCTCTAC	TGACAAGATG	GCAATGCAAC	3120
GTTTGAAAGA	TGCGGCTGAA	AAAGCGAAGA	AAGACCTTTC	TGGTGTAAC	TCAACACAAA	3180
TCAGCTTGCC	ATTTATCACT	GCAGGTGAGG	CTGGACCTCT	TCACTTGGA	ATGACTTTGA	3240
CTCGTGCGAA	ATTTGACGAT	TTGACTCGTG	ACCTTGTTGA	ACGTACAAAA	GTTCCAGTTC	3300
GTCAAGCCCT	TTCAGATGCA	GGTTTGAGCT	TGTCAGAAAT	CGACGAAGTT	ATCCTTGTTG	3360
GTGGTCAAC	TCGTATCCCT	GCCGTTGTTG	AAGCTGTTAA	AGCTGAAACT	GGTAAAGAAC	3420
CAAACAAATC	AGTAAACCCT	GATGAAGTAG	TTGCTATGGG	TGCGGCTATC	CAAGGTGGTG	3480
TGATTACTGG	TGATGTCAAG	GACGTTGTCC	TTCTTGATGT	AACGCCATTG	TCACTTGGTA	3540
TCGAAACAAT	GGGTGGAGTA	TTTACAAAAC	TTATCGATCG	CAACACTACA	ATCCCAACAT	3600
CTAAATCACA	AGTCTTCTCA	ACAGCAGCAG	ACAACCAACC	AGCCGTTGAT	ATCCACGTTT	3660
TTCAAGGTGA	ACGCCCAATG	GCAGCAGATA	ACAAGACTCT	TGGACGCTTC	CAATTGACTG	3720
ATATCCCAGC	TGCACCTCGT	GGAATTCCTC	AAATCGAAGT	AACATTTGAC	ATCGACAAGA	3780
ACGGTATCGT	GTCTGTTAAG	GCCAAAGACC	TTGGAAGTCA	AAAAGAACAA	ACTATTGTCA	3840
TCCAATCGAA	CTCAGGTTTG	ACTGACGAAG	AAATCGACCG	CATGATGAAA	GATGCAGAAG	3900
CAAACGCTGA	AGCCGATAAG	AAACGTAAAG	AAGAAGTAGA	CCTTCGTAAT	GAAGTAGACC	3960

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AAGCAATCTT TGC GACTGAA AAGACAATCA AGGAAACTGA AGGTAAAGGC TTCGACGCAG 4020  
 AACGTGACGC TGCCCAAGCT GCCCTTGATG ACCTTAAGAA AGCTCAAGAA GACAACAAC 4080  
 TGGACGACAT GAAAACAAAA CTTGAAGCAT TGAACGAAAA AGCTCAAGGA CTTGCTGTTA 4140  
 AACTCTACGA ACAAGCCGCA GCAGCGCAAC AAGCTCAAGA AGGAGCAGAA GGCGCACAAG 4200  
 CAACAGGGAA CGCAGGCGAT GACGTCGTAG ACGGAGAGTT TACGAAAAAG TAAGATGAGT 4260  
 GTATTGGATG AAGAGTATCT AAAAAATACA CGAAAAGTTT ATAATGATTT TTGTAATCAA 4320  
 GCTGATAACT ATAGAACATC AAAAGATTTT ATTGATAATA TTCCAATAGA ATATTTAGCT 4380  
 AGATATAGAG AATTATATTA GCTGAACATG ATAGTTGTAT CAAAAATGAT GAAGCGGTAA 4440  
 GGAATTTTGT TACCTCAGTA TTGTTGTCTG CATTTGTATC GGCGATGGTA CCGTATCTGA 4500  
 CGAACGTTCA GCTTATAT 4518

(2) INFORMATION FOR SEQ ID NO: 122:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 8145 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 122:

TGCTATTTTC GATTCCCTTG GCGTTTTGA TTGCCTTTGC CTTGCAAGTC CATTGGAAGC 60  
 CCCTCCATTA TCTGATTAAC ATTTACATCT GGGTTATGCG AGGAACCCCC TTA CTCTTG C 120  
 AACTGATTTT TATCTATTAT GTGCTCCCAA GTATTGGGAT TCGTTTAGAC CGCCTTCCTG 180  
 CAGCTATTAT TGCTTTTGTT CTCAACTATG CAGCTTACTT TGCAGAAATT TTCCGTGGGG 240  
 GAATTGACAC TATTCCAAGA GGACAGTATG AGGCCGCCAA GGTCTTGAAG TTTAGCCCTT 300  
 TTGACAGAGT GCGCTATATT ATCTTGCCCC AAGTGACCAA GATCGTTCTT CCTAGTGTCT 360  
 TTAATGAAGT TATGAGTTTG GTCAAGGATA CTTCTTTGGT CTATGCTCTC GGAATTTTCAG 420  
 ACCTTATCTT GGCTAGTCGA ACAGCTGCTA ACCGCGATGC TAGTCTAGTT CCTATGTTCT 480  
 TGGCAGGAGC CATTTATTTG ATTTTGATTG GGATTGTGAC AATTATTTCC AAAAAAGTTG 540  
 AGAAGAAGTA TAGTTATTAT AGATAGGAGG CTGCCATGTT AGAATTACGA AATATCAATA 600  
 AAGTCTTTGG AGACAAACAA ATCCTGTCTA ATTCAGTCT AAGTATTCCT GAAAAGCAAA 660  
 TCCTGGCTAT CGTTGGACCT TCTGGTGGAG GTAAGACAAC TCTTTTACGT ATGCTTGCAG 720  
 GTCTTGAAAC CATTGATCA GGGCAAATCT TTTATAATGG ACAACCTTTA GAGCTGGATG 780

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AATTGCAGAA	GCGCAATCTA	CTGGGATTTG	TCTTCCAAGA	TTTTCAACTA	TTTCCTCATC	840
TATCAGTTCT	GGAAAATTTG	ACTTTATCGC	CTGTGAAGAC	CATGGGAATG	AAGCAGGAAG	900
AGGCTGAGAA	GAAGGCGAGT	GGACTCTTGG	AACAGTTAGG	ACTAGGAGGA	CACGCAGAGG	960
CCTATCCTTT	CTCACTATCT	GGTGGGCAAA	AGCAGCGGGT	GGCTTTGGCG	CGTGCTATGA	1020
TGATTGACCC	AGAAATCATT	GGCTACGATG	AACCAACTTC	TGCCCTGGAT	CCAGAATTAC	1080
GTTTGGAAGT	GGAGAAGCTA	ATCTTGCAAA	ATAGGGAACT	TGGGATGACC	CAGATTGTGG	1140
TTACCCATGA	TTTGCAGTTT	GCTGAAAATA	TCGCAGATGT	ATTATTGAAA	GTAGAACCTA	1200
AATAGGAGGA	AAAATGGATG	AAAAAATGGA	TGCTTGTATT	AGTCAGTCTG	ATGACTGCTT	1260
TGTTCTTAGT	AGCTTGTGGG	AAAAATCTA	GCGAAACTAG	TGGAGATAAT	TGGTCAAAGT	1320
ACCAGTCTAA	CAAGTCTATT	ACTATTGGAT	TTGATAGTAC	TTTTGTTCCT	ATGGGATTTG	1380
CTCAGAAAGA	TGGTTCTTAT	GCAGGATTTG	ATATTGATTT	AGCTACAGCT	GTTTTTGAAA	1440
AATACGGAAT	CACGGTAAAT	TGGCAACCGA	TTGATTGGGA	TTTGAAAGAA	GCTGAATTGA	1500
CAAAGGAAC	GATTGATCTG	ATTTGGAATG	GCTATCCGC	TACAGACGAA	CGCCGTGAAA	1560
AGGTGGCTTT	CAGTAACTCA	TATATGAAGA	ATGAGCAGGT	ATTGGTTACG	AAGAAATCAT	1620
CTGGTATCAC	GACTGCAAAG	GATATGACTG	GAAAGACATT	AGGAGCTCAA	GCTGGTTCAT	1680
CTGGTTATGC	GGACTTTGAA	GCAAATCCAG	AAATTTTGAA	GAATATTGTC	GCTAATAAGG	1740
AAGCGAATCA	ATACCAAACC	TTTAATGAAG	CCTTGATTGA	TTTGAAAAAC	GATCGAATTG	1800
ATGGTCTATT	GATTGACCGT	GTCTATGCAA	ACTATTATTT	AGAAGCAGAA	GGTGTTTTAA	1860
ACGATTATAA	TGTCTTTACA	GTTGGACTAG	AAACAGAAGC	TTTTGCGGTT	GGAGCCCGTA	1920
AGGAAGATAC	AAACTTGTTT	AAGAAGATAA	ATGAAGCTTT	TTCTAGTCTT	TACAAGGACG	1980
GCAAGTTCCA	AGAAATCAGC	CAAAAATGGT	TTGGAGAAGA	TGTAGCAACC	AAAGAAGTAA	2040
AAGAAGGACA	GTAAGATAAA	ATAGTGGCTG	AAACTGCGTT	TTGATTAGCA	AAACGTAGTT	2100
TTTTTTGTAA	TCTAGGAAAA	CGATAATAGC	GATTGAATAT	GGATAATTGA	ATATGGAATA	2160
GCCCACTGTG	ATTTCTAAAA	CATTGTAAAA	AATTGATTTG	ACTTCCAAAA	TTAAAATGTT	2220
CTGTAATGAA	ATACTGATGT	AACTGTTTTA	GGAACAATAA	AACGCATAAT	ATCAAGGTTT	2280
TTGCACCTTA	CATTATGCGT	TTTTGTGATT	TTAAGACTTG	TTAGCTGATT	TTTTACAATC	2340
CTGCGAAATC	TTTGATTTCT	TGTGCTGACA	TTGAAGAGTC	GCAACGGACG	TTGATTGTGC	2400
CATCTGTAAT	ATGAACAAAA	CCTGGTACAG	TTGGGATTCC	ATAGCGTGAG	CGGAATGCTT	2460
GCAAATCATT	GAGTTGGCTT	GGTTCTTCAC	TATTGATGAA	GTAAATGTGA	GCTTTGGTTT	2520
CAGCTACGAC	ACCTGACAA	GTACCTGCAA	ATTTACGGCA	GTAAGGGCAA	GTTTTGCGAC	2580

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CGATAAAGAA	GGTTGCAGTT	TCTTTTAT	CAAGAGCTTC	TTGCGCACGC	ACAACTGTAG	2640
TGACTTCAAG	GTCTTTGATG	TTATCTAAAA	ATTGTTCCAT	GAGATTACCT	CGCTTTCATT	2700
GATAAGTCTA	GTATGCCATA	AAGTTTCTAA	AATTGCTTAG	ATTTGATACG	AAAAAAGATG	2760
AGGTTGGTTG	GTCTCATCTT	TTATAGGTCT	TTATTTTACA	AATGCATTGA	TTTCTGCTTC	2820
GATGTTAGCA	ATCTTAGCTT	GTGATTCTTC	GTTGGTTTCC	CCTACAACTG	CAATGTAGAA	2880
CTTGATTTTT	GGTCTGTAC	CTGAAGGGCG	AACGGCAATC	CATGAACCGT	CAGCAAGTGT	2940
GTATTTCAAC	ACATCACTTG	GAGGAGTTGT	CAAGTTTGTA	ACAGTACCGT	CAGCAACAGT	3000
AGCAGTTTGT	GCCTTGAAGT	CTTCTACGAC	AGTGATAGCT	GTTGCGTTCC	ATTCTGTTGG	3060
AGCATTGTTG	CGGAATTTAG	CCATAATCGC	TTTGATTGTG	TCAGCACCAT	CGACACCTGA	3120
AAGAGTAACA	GAGATTGTTT	TTTCTGCGTA	GTAGCCATAT	TCTTTATAGA	TTTCTTCGAT	3180
ACCGTCAGCA	AGTGTCAAAC	CACGAGAACG	GTAGTAGGCA	GCAAGTTCAG	CAACTACAAG	3240
AACGGCTTGG	ATGGCATCTT	TATCACGTAC	AAATGGTTTA	ATCAAGTAAC	CGAAGCTTTC	3300
TTCAAATCCC	ATCATGTAAG	TGTGGTTGTG	TTTTTCTTCG	AATCTCTGGA	TTTTTTCAGC	3360
GATAAATTTG	AAACCTGTCA	AGACGTTGAA	CATAGTTGCG	CCGTAGCTTT	CAGCAATCTT	3420
CGTTACCAAG	TCAGTTGAAA	CGATAGATTT	GCAGAGAGCG	GCATTTTCAG	GAAGAGTTCC	3480
AGCGTTTTTG	TGAGCTTCCA	AGATGTATTT	AGCCATGATA	GCACCGATTT	GGTTACCTGA	3540
AAGGTTGAGG	TAGCTACCAT	CTTTTTGAAG	AACTTCAACA	CCAACACGGT	CAGCGTCTGG	3600
GTCAGTTGCG	ACAAGAACAT	CTGCACCAAC	TTGACGACCA	AGTTCTTCAG	CAAGGGCAAA	3660
GGCTGCTTGG	CTTCTGCGGT	TTGGAGATGT	TACAGTTGAA	AAGTCTGGGT	CAGCAGTTGC	3720
TTGCGCTTCA	ACAACTTGAA	CAGAGTCAAA	TCCTGCTTGG	GCAAGAGCAC	GACGAGCCAA	3780
CATTTACCA	GTACCATGAA	GTGGTGTGTA	GACAATCTTC	ATGTCTTTAC	CAAATTCCTC	3840
AATCAAGGCT	GGGTTGATGT	TTATGTCCTT	AACCTCTTTA	AGGTATTCTA	TGTCAACAGC	3900
TTCGCCGATA	ACTTCAATCA	AGCCAGAAGC	TTTTTCAGTT	TCCACATCAG	CAACTTCAAC	3960
TGCAAATGGG	TTTTCGATTG	CACGGATATA	AGTAGTCAAA	GCGTCCGCAT	CGTGTGGAGG	4020
CATTTGTCCA	CCGTCTTCAC	CGTAAACCTT	GTAACCGTTA	AATGGAGCAG	GGTTGTGGCT	4080
GGCTGTGACC	ATGATACCTG	CGAAACAGTT	GAGATGACGA	ACTGCAAATG	ATAGTTCTGG	4140
AGTCGGACGA	AGGCTTTCAA	ATACGTAAGA	TTTGATGCCG	TGTTTAGCAA	GAAGTCCGC	4200
AGATTCAAAG	GCAAACCTCAG	GTGAGAAGTG	ACGGCTATCG	TAGGCAATTG	CTACACCGCG	4260
TTCTTTCTCG	TTTCCACCTT	TTGACTCAAT	CAAACGAGCC	AATCCTTCAG	TAGCTTGGCG	4320

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AACAACGTAG	ATGTTGATAC	GGTTTGTACC	AGCACCAACC	AAGCCACGCA	TACCTGCAGT	4380
ACCAAATTCA	AGATTTGTAT	AGAAGGCATC	TTCCTTAGTT	TTTTCGTCCA	TATTTTCCAA	4440
ATCTTGACGA	AGGTAGTCAC	GAAGCTCCAC	AAAATCAACC	CATTTCTGGT	AATTTTCTTG	4500
GTAAGACATT	CAAATCTCC	TTTATTTTTA	AAACATTTAA	TCAGTTTAAT	TATATCATTT	4560
TTTTTAGTTT	TAGTAAAACC	TTATCTGCTT	CGAACATCTC	TTCAAACCAG	GTCAGATTGA	4620
ATTTTGGGGT	TATATGATGT	TGAGGCTAGG	AAAAATTCAA	TTTCAGTAAA	AAAAGTAAGT	4680
CTTCTCATAA	CAAACATTG	ATATAGTTAC	TTAGTTTTAA	ACAAGCATAT	TATAATAAAG	4740
CTATGGCATA	TAGTACTGAT	TTTAAACAGC	GAGCATTAGA	TTACATCAAA	GAGGGGCACA	4800
GCCATGTCTGA	GGCAGCCAAG	TTTTTTGGTG	TTGGCGTCAG	AACTCTCTTC	ACGTGGGAAA	4860
AGAAAGACGT	GAACAAGAAC	ACATAGAGAG	GAAAAAGCGA	GTCGTCAAAA	ACCGAAAGAT	4920
TCCTTTAGAG	GAATTGAAAG	CCTTTGTAGA	GGCTCATCCA	GATGCTTTTT	TACGGGAAAT	4980
TGCGGCACAT	TTTGATTGTG	CTGTTCTTTC	AGTATGGGCA	GCTTTAAAGC	AGATTAAGGT	5040
CACCTTAAAA	AAAGATGACG	AGCTTTAAGG	AACAAGACCC	AGAAAAGTAG	CCTTATTTCT	5100
TAAGAATTTT	AATAGTTTAA	AGCACCTAGC	ACCTGTTTAT	ATTGATGAAA	CAGGAATCGA	5160
CCGCTATCTC	TATCGTCCTT	ATGCAGGGGC	TCCTAGAGGG	GAGAAAGTCT	ATGAAAAGAT	5220
TAGCGGACGT	CGTTTTGAGC	GAAC TTCAAT	TGTTGCAGGA	CAAGTAGACG	GAGAGTTTAT	5280
AGCTCCCATG	ATTTACAAGA	AAAGCATGAC	AAGCGATTTC	TTTGTGGAGT	GGTTCAAAAC	5340
GCAACTCCTA	CCTGCTTTGA	AGACACCTCA	TGTTATTGTC	ATGGGCAATG	CTGGTTTTCA	5400
TCCCAAGAAC	ATTTTGATG	AACTCTGCAT	CCAAGATAAA	CAC TTTTCT	TACCTCTACC	5460
ACCTTATTCA	CCGGATTGTA	ATCCTATTGA	GCAAGCTTGG	GCTATCTTGA	AAAAGAAAGT	5520
GACGGATGTA	TTAAGGGAAG	TTCCAACAT	TTTTGAATGT	TTGGAATGCT	TTTTTAAAC	5580
TAGATGACTA	TAACGGTTCT	AAAGGAACCT	ATCGAGTAGT	CATTAAAAC	AAGGATACTG	5640
CTGGTTAAGA	GAAGACGGTA	TACAATCAAA	CCATTCACCG	TGTAGCCGAA	ATCGTTCAGA	5700
ATGAAGACTT	GTATCAGAAT	GAAGACTTGT	ATAAGAAAGG	TTTGAATGTT	GAAC TTGCGC	5760
ACCAACAAAT	TAAGGGATTT	TTTGAAGCAG	AGTTTAAAAA	TCGTATTAAT	GGAGTTCTTA	5820
ATACTAAAA	AAAAAATAGT	ACATTAAATC	GTGTAAATAA	AAAAACTATA	CACCAGAGCA	5880
ACAAAACTC	CATGATCAAT	TTGAAGCAGA	AGCAACGGAA	GATGCTAAAA	AACAAGGCGA	5940
TATTGTGTTG	AATGTTGACC	AGGATTTTAT	GAGCATATCT	AAGTCTAATA	AAAGTGGTTC	6000
AGACTGGAAG	AAAAC TTCA	CAGTGAGGAT	AACCAATAGG	CTAGCAAATG	ACTTGAATAA	6060
TGTCTTGAAA	CAGGTTGATA	AAGATACTCC	TAATACCCCA	ACTTGGCTAA	ACTCAGCTGC	6120



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TTCTAAAGCT AAAGATGATG ACAGAGTATA TAAACTACTG AAGACTCTTA TACCAGGAGA	6180
AAATTACCTA TCATGTTAAG GATAATCAGC TAGAAGTAGA AACAGATAAA TACACATATA	6240
CTGCCGCTAG AAATGGTAGT AAGGAAGTTG GTATTCAAGA GTCAGATATA GCAGCAACTC	6300
TAAGTGCCGA TGAATATAAT TCTAATCGCC AAACCTTTTGA GAGAGAATAC AAATACAAAA	6360
GCAAATGCCC TTAATAATGG TTGGGCTAGA TCTGGTTCTG AAGAGTTCAA AAAGTTCTCC	6420
CACTTTGTAG GGGTAGACAA AGGGATTGTG CGAACGAATG TACTGACTGG TAAAAACTA	6480
TCTGATAAGA TTAGGAAAGA AGTGGGCTCT GGAGATAGCA AACTAGGAAA AGGCGGCTAT	6540
TTCTCTACTG GGGATGTTCT ATTAGGAAAA GATGTTGTTT CTTATACCGT ACAAGTATTT	6600
TCAGAGAATA ATGAAAGAGT AGGAGTAAAC ACTCAAAGTC ACCGTGTTCA GTATAATCTC	6660
CCAATTCTAG CTGACTTTTC AGTCATCCAA GATACTGTGG AACCATCACG AACC GTTGT	6720
GAAAAAATCA TTCCAAAAC AAATATTCCC GAAGAAGAGA AAGGGAAAAA AACCGAAGAA	6780
ATCAAGAAAA AGAAAAAAC CTCAGAATTG GCAGAACTAA TCTCAGAAAA TGTGAAAGTT	6840
CGCTATGTTG ATGAACAAGG GCGTTTGCTA TCATTGAAAA ATGATACTGG AATTGGAGAA	6900
AAAGAAAGTG ACGGAACCTA CATTACCAAT AAAAAACAAC TGATTGGTAC CAGCTATAAT	6960
GTCACAGATA AAAA ACTCAG TAGCATGACT ACTACTGACG GAAAATATTA TACTTTTAAA	7020
GAAGCAGATA CAAATTCTGC AAGTTTAACT GGGAATATTG TAAGCGAAGG TAGAACAGTG	7080
ACCTTAGTTT ATAGAGAAAG CGAAGCGCCA ACCACTGCTA CAGTAACAGC CAATTACTAT	7140
AAAGAAGGTG GGCAAGAGAA GTTGGTAGAG TCTGTTATAA AAGCTGATTT AGCGATAGGT	7200
TCTGAGTATA CCACAGAATC AAAA ACTATT GAAGGGAAAA CAACAACTGA GGACAAAGAA	7260
GACCGAGTTA TCACAAGGAA AACAACATAC ACCTTGGTAG CAACTCCTGA AAATGCGTAC	7320
CAGAAGACGG TGCAACAGTT GACTATTACT ACCGTGAGAA TGTTGAGGAA ACAGTGGTTC	7380
CCAAAACAGC AACCTCTACT GAGACGAAGA CTATAACGCG TATCATTCAT TACGTTGATA	7440
AAGTTACGAA CCAAAATGTA AAAGAAGATG TTGTTCAACC TGTAACCTTA AGCCGTACAA	7500
AAACTGAGAA CAAGGTCACG GGAGTTGTAA CCTACGGTGA ATGGACAACA GGAAACTGGG	7560
ACGAGGTTAT ATCTGGTAAG ATTGACAAGT ACAAAGATCC AGATATTCCA ACAGTTGAAT	7620
CACAAGAAGT TACGTCAGAC TCTAGTGATA AAGAAATAAC GGTAAGGTAT GACCGTTTAT	7680
CAACACCAGA AAAACCAATC CCACAACCAA ATCCAGAGCA TCCAAGTGTT CCGACACCAA	7740
ACCCAGAACT ACCAAATCAA GAGACTCCAA CACCAGATAA ACCAACTCCA GAACCAGGTA	7800
CTCCAAAAAC TGAAACTCCA GTGAATCCAG ACCCAGAAGT TCCGACTTAT GAGACAGGTA	7860

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AGAGAGAGGA ATTGCCAAAC ACAGGTACAG AAGCTAATGC TACCTTGGCT AGTGCTGGTA	7920
TCATGACCTT GTTAGCTGGT CTAGGATTAG GATTTTTCAG GAAAAAGAA GATGAAAAAT	7980
AATAGATTTT AGAATCTAGG AACCAGGAAA AGCTCACAGA TGTGGGCTTT TTTCCTGGTT	8040
TTGAGAACGA GGTCTTTCGT AAAGAATAAA AACGCTTACA AGTCTGTTGA ACTGGGAAAC	8100
TATGAATCCT ATTTTAA AAATATTTC AGAAATCAGT TCGG	8145

(2) INFORMATION FOR SEQ ID NO: 123:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 8697 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 123:

CGGTACCGGG AACGATACTT AGTCTAATTT TGCACCTTTT CCATGTATGG TAAAGGTTTT	60
TCTTTTTTTA AAAAGGAAAA CGAGAAGAGG AGGTTCTTAT GAAAGCAAGC ATTGCCTTGC	120
AAGTTTTACC CCTAGTACAG GGGATTGATC GGATAGCTGT TATTGATCAG GTCATTGCTT	180
ATCTGCawAC TCAAGAAGTG ACGATGGTAG TGACACCATT TGAAACGGTC TTGGAAGGGG	240
AGTTTGATGA GCTTATGCGC ATTCTAAAAG AAGCGCTGGA AGTGGCAGGG CAGGAGGCAG	300
ACAATGTCTT TGCCAATGTC AAAATAAATG TAGGAGAGAT TTAAAGTATT GATGAGAAAC	360
TTGAGAAGTA TACTGAGACG ACACATTAGT CTATTGGGCT TTCTCGGAGT ATTGTCAATC	420
TGGCAGTTAG CAGGTTTTCT TAAACTTCTC CCCAAGTTTA TCCTGCCGAC ACCTCTTGAA	480
ATTCTCCAGC CCTTTGTTCG TGACAGAGAA TTTCTCTGGC ACCATAGCTG GGCGACCTTG	540
AGAGTGGCTT TACTGGGGCT GATTTTGGGA GTTTTGATTG CCTGTCTTAT GGCTGTGCTC	600
ATGGATAGTT TGACTTGGCT CAATGACCTG ATTTACCTTA TGATGGTGGT CATTCAGACC	660
ATTCCGACCA TTGCCATAGC TCCTATCCTG GTCTTGTGGC TAGGTTATGG GATTTTGCCC	720
AAGATTGTCT TGATTATCTT AACGACAACC TTTCCCATCA TCGTTAGTAT TTTGGACGGT	780
TTTAGGCATT GCGACAAGGA TATGCTGACC TTGTTTAGTC TGATGCGGGC CAAGCCTTGG	840
CAAATCCTGT GGCATTTTAA AATCCCAGTT AGCCTGCCTT ACTTTTATGC AGGTCTGAGG	900
GTCAGTGTCT CCTACGCCTT TATCACAAC GTGGTATCTG AGTGGTTGGG AGGTTTTGAA	960
GGTCTTGGTG TTTATATGAT TCAGTCTAAA AAAGTGTTC AGTATGATAC CATGTTTGCC	1020
ATTATTATTC TGGTGTGAT TATCAGTCTT TTGGGTATGA AGCTGGTCGA TATCAGTGAA	1080
AAATATGTGA TTAAATGGAA ACGTTCGTAG AATTAGAATG TTTCTGAAAA AGAAAAGAGG	1140

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AAATCAAAAT GAAGAAAACA TGGAAAGTGT TTTTAACGCT TGTAACAGCT CTTGTAGCTG	1200
TTGTGCTTGT GGCCTGTGGT CAAGGAACTG CTTCTAAAGA CAACAAAGAG GCAGAACTTA	1260
AGAAGGTTGA CTTTATCCTA GACTGGACAC CAAATACCAA CCACACAGGG CTTTATGTTG	1320
CCAAGGAAAA AGGTTATTTT AAAGAAGCTG GAGTGGATGT TGATTGAAA TTGCCACCAG	1380
AAGAAAGTTC TTCTGACTTG GTTATCAACG GAAAGGCACC ATTTGCAGTG TATTTCCAAG	1440
ACTACATGGC TAAGAAATTG GAAAAAGGAG CAGGAATCAC TGCCGTTGCA GCTATTGTTG	1500
AACACAATAC ATCAGGAATC ATCTCTCGTA AATCTGATAA TGTAAGCAGT CCAAAGACT	1560
TGGTTGGTAA GAAATATGGG ACATGGAATG ACCCAACTGA ACTTGCTATG TTGAAAACCT	1620
TGGTAGAATC TCAAGGTGGA GACTTTGAGA AGGTTGAAAA AGTACCAAAT AACGACTCAA	1680
ACTCAATCAC ACCGATTGCC AATGGCGTCT TTGATACTGC TTGGATTAC TACGGTTGGG	1740
ATGGTATCCT TGCTAAATCT CAAGGTGTAG ATGCTAACTT CATGTACTTG AAAGACTATG	1800
TCAAGGAGTT TGACTACTAT TCACCAGTTA TCATCGCAAA CAACGACTAT CTGAAAGATA	1860
ACAAAGAAGA AGCTCGCAAA GTCATCCAAG CCATCAAAAA AGGCTACCAA TATGCCATGG	1920
AACATCCAGA AGAAGCTGCA GATATTCTCA TCAAGAATGC ACCTGAACTC AAGGAAAAAC	1980
GTGACTTTGT CATCGAATCT CAAAAATACT TGTCAAAGA ATACGCAAGC GACAAGGAAA	2040
AATGGGGTCA ATTTGACGCA GCTCGCTGGA ATGCTTTCTA CAAATGGGAT AAAGAAAATG	2100
GTATCCTTAA AGAAGACTTG ACAGACAAAG GCTTCACCAA CGAATTTGTG AAATAATGAC	2160
AGAAATTAGA CTAGAGCAGC TCAGTTATGC CTATGGTCAG GAGAGGATTT TAGAGGATAT	2220
CAACCTACAG GTGACTTCAG GCGAAGTGGT TTCCATCCTA GGCCCAAGTG GTGTTGGA	2280
GACCACCCTC TTTAATCTAA TCGCTGGGAT TTTAGAAGTT CAGTCAGGGA GAATTGTCCT	2340
TGATGGTGAA GAAAAATCCA AGGGGCGCGT GAGTTATATG TTGCAAAAGG ATCTGCTCTT	2400
GGAGCACAAG ACGGTGCTTG GAAATATCAT TCTGCCCCTC TTGATTCAAA AGGTGGATAA	2460
GGCAGAAGCT ATTTCCCGAG CGGATAAAAT TCTTGCGACC TTCCAGCTGA CAGCTGTAAG	2520
AGACAAGTAT CCTCATGAAC TTAGCGGTGG GATGCGCCAG CGTGTAGCCT TACTCCGGAC	2580
CTACCTTTTT GGGCACAAGC TCTTCTCTT AGATGAGGCC TTTAGCGCCT TGGATGAGAT	2640
GACAAAGATG GAACTCCACG CTTGGTATCT TGAGATTCAC AAGCAGTTGC AGCTAACAAAC	2700
CCTGATCATC ACGCATAGTA TTGAGGAGGC CCTCAATCTC AGCGACCGTA TCTATATCTT	2760
GAAAAATCGC CCTGGGCAGA TTGTTTCAGA AATTAAACTA GATTGGTCTG AAGATGAGGA	2820
CAAGGAAGTC CAAAAGATTG CCTACAAACG TCAAATTTTG GCGGAATTAG GCTTAGATAA	2880

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GTAGAAAAAT	AGGGAGTTGG	TGAAGATTAT	CCTTTACCAG	CGCCCTTTT	CTTTTAAAAA	2940
TGAGAAAAAT	TCGGTATAAT	AGTCAAACAA	GGTCAAGGTT	TAAAGAGAGA	GGTGGGTTTG	3000
TTATGAGATT	TAAAAATACA	TCGGATCATA	TTGAGGCCTA	CATCAAGGCG	ATTTTAGATC	3060
AATCTGGTAT	CGTGGAGTTG	CAACGGAGTC	AGTTGGCAGA	TACCTTTCAG	GTTGTTCCTA	3120
GTCAGATTAA	CTACGTGATC	AAGACACGCT	TTACGGAAAG	TAGAGGCTAC	TTGGTTGAAA	3180
GTAAGCGTGG	TGGCGGAGGC	TACATTTCGT	TAGGACGGAT	TGAGTTTCT	AGTCATCATG	3240
AAATGCTCCG	GGAGCTGCTT	TACTCGATTG	GTGAGCGAGT	CAGTCAAGAA	ATTTATGAGG	3300
ATATTCTCCA	GCTTTTGGTT	GAGCAGGAAT	TGATGACCAA	GCAGGAGATG	AATTTGCTAG	3360
AATCAGTAGC	TTTGATCGC	GTTTTAGGAG	AAGAAGCTCC	AGTTGTTCGA	GCAAACATGC	3420
TACGTCAGAT	CATACAAGAG	GATAGATAGAA	AAGGGAAGTA	AGATGAACTA	TTCAAAAGCA	3480
TTGAATGAAT	GTATCGAAAG	TGCCTACATG	GTTGCTGGAC	ATTTTGGAGC	TCGTTATCTA	3540
GAGTCGTGGC	ACTTGTGTAT	TGCCATGTCT	AATCACAGTT	ATAGTGTAGC	AGGGGCAACT	3600
TTAAATGATT	ATCCGTATGA	GATGGACCGT	TTAGAAGAGG	TGGCTTTGGA	ACTGACTGAA	3660
ACGGACTATA	GCCAGGATGA	AACCTTTACG	GAATTGCCGT	TCTCCCGTCG	TTTGACAGTT	3720
CTTTTGTATG	AAGCAGAGTA	TGTAGCGTCA	GTGGTCCATG	CTAAGGTACT	AGGGACAGAG	3780
CACGTCCTCT	ATGCGATTTT	GCATGATAGC	AATGCCTTGG	CGACTCGTAT	CTTGGAGAGG	3840
GCTGGTTTTT	CTTATGAAGA	CAAGAAAGAT	CAGGTCAAGA	TTGCTGCTCT	TCGTCGAAAT	3900
TTAGAAGAAC	GGGCAGGCTG	GAATCGTGAA	GATCTCAAGG	CTTTACGCCA	ACGCCATCGT	3960
ACAGTAGCTG	ACAAGCAAAA	TTCTATGGCC	AATATGATGG	GCATGCCGCA	GACTCCTAGT	4020
GGTGGTCTCG	AGGATTATAC	GCATGATTTG	ACAGAGCAAG	CGCGTTCTGG	CAAGTTAGAA	4080
CCAGTCATCG	GTCGGGACAA	GGAAATCTCA	CGTATGATTC	AAATCTTGAG	CCGGAAGACT	4140
AAGAACAACC	CTGTCTTGGT	TGGGGATGCT	GGTGTGGGA	AAACAGCTCT	GGCGCTTGGT	4200
CTTGCCCAGC	GTATTGCTAG	TGGTGACGTG	CCTGCGGAAA	TGGCTAAGAT	GCGCGTGTTA	4260
GAACCTTGATT	TGATGAATGT	CGTTGCAGGG	ACACGCTTCC	GTGGTGACTT	TGAAGAACGC	4320
ATGAATAATA	TCATCAAGGA	TATTGAAGAA	GATGGCCAAG	TCATCCTCTT	TATCGATGAA	4380
CTCCACACCA	TCATGGGTTT	TGGTAGCGGG	ATTGATTCGA	CTCTGGATGC	GGCCAATATC	4440
TTGAAACCAG	CCTTGGCGCG	TGGAACCTTG	AGAACGGTTG	GTGCCACTAC	TCAGGAAGAA	4500
TATCAAAAAC	ATATCGAAAA	AGATGCGGCA	CTTTCTCGTC	GTTTCGCTAA	AGTGACGATT	4560
GAAGAACCAA	GTGTGGCAGA	TAGTATGACT	ATTTTACAAG	GTTTGAAGGC	GACTTATGAG	4620
AAACATCACC	GTGTACAAAT	CACAGATGAA	GCGGTTGAAA	CAGCGGTTAA	GATGGCTCAT	4680

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CGTTATTTAA	CCAGTCGTCA	CTTGCCAGAC	TCTGCTATCG	ATCTCTTGGA	TGAGGCGGCA	4740
GCAACAGTGC	AAAATAAGGC	AAAGCATGTA	AAAGCAGACG	ATTCAGATTT	GAGTCCAGCT	4800
GACAAGGCCC	TGATGGATGG	CAAGTGGA	CAGGCAGCCC	AGCTAATCGC	AAAAGAAGAG	4860
GAAGTACCTG	TCTACAAAGA	CTTGGTGACA	GAGTCTGATA	TTTTGACCAC	CTTGAGTCGC	4920
TTGTCAAGAA	TCCCAGTTCA	AAAAC TGACT	CAAACGGATG	CTAAGAAGTA	TTTAAATCTT	4980
GAAGCAGAAC	TCCATAAACG	GGTTATCGGT	CAAGATCAAG	CTGTTTCAAG	CATTAGCCGT	5040
GCCATTCGCC	GCAACCAGTC	AGGGATTCGC	AGTCATAAGC	GTCCGATTGG	TTCTTTTATG	5100
TTCTTAGGGC	CTACAGGTGT	CGGGAAAAC	GAATTAGCCA	AGGCTCTGGC	AGAAGTTCTT	5160
TTTGACGACG	AATCAGCCCT	TATCCGCTTT	GATATGAGTG	AGTATATGGA	GAAATTTGCA	5220
GCTAGTCGTC	TCAACGGAGC	TCCTCCAGGC	TATGTAGGAT	ATGAAGAAGG	TGGGGAGTTG	5280
ACAGAGAAGG	TTCGCAATAA	ACCCTATTCC	GTTCTCTCT	TTGATGAGGT	AGAGAAGGCC	5340
CACCCAGATA	TCTTTAATGT	TCTCTTGCAG	GTTCTGGATG	ACGGTGTCTT	GACAGATAGC	5400
AAGGGACGCA	AGGTCGATTT	TTCAAATACC	ATTATCATTA	TGACATCGAA	TCTAGGTGCG	5460
ACTGCCCTTC	GTGATGATAA	GACTGTTGGT	TTTGGGGCTA	AGGATATTCG	TTTTGACCAG	5520
GAAAAATATG	AAAAACGCAT	GTTTGAAGAA	CTGAAAAAAG	CTTATAGACC	GGAATTCATC	5580
AACCGTATTG	ATGAGAAGGT	GGTCTTCCAT	AGCCTATCTA	GTGATCATAT	GCAGGAAGTG	5640
GTGAAGATTA	TGGTCAAGCC	TTTAGTGGCA	AGTTTGACTG	AAAAAGGCAT	TGACTTGAAA	5700
TTACAAGCTT	CAGCTCTGAA	ATTGTTAGCA	AATCAAGGAT	ATGACCCAGA	GATGGGAGCT	5760
CGCCCACTTC	GCAGAACCCT	GCAAACAGAA	GTGGAGGACA	AGTTGGCAGA	ACTTCTTCTC	5820
AAGGGAGATT	TAGTGGCAGG	CAGCACACTT	AAGATTGGTG	TCAAAGCAGG	CCAGTTAAAA	5880
TTTGATATTG	CATAAAAGAA	TAAAAGTATC	AGCATCTGAC	CATAAGTCAC	AGTGGAGTGA	5940
AATTCATGA	AAATCAAAGA	GCAAAC TAGG	CAGCTAGCCG	CAGGTTGCTC	AAAACACTGG	6000
TTTGAGGTTG	CAGATAGAGC	TGACGTGGTT	TGAAGAGATT	TTCGAAGAGT	ATGAAACTAA	6060
AACCTATAGC	TTCTAAACGA	TCCGTGGTTT	TCATCATTC	ACACAAAATT	CATATGTTTA	6120
TTACCCCTCCG	TCGTATTTGT	CTTAGAGCGT	GTGTAGTAGA	AAAAGAGCAG	TCTTATCTGA	6180
AATTTTTATT	CTTTCAAAG	AGACCTGTTT	CTTTTTTGCA	TGTCAAATCC	GTTCTAGCTG	6240
GTATTTGAAA	AATCAAAC TA	ATATTCAATG	AAAATCAAAG	AACAACTAG	GAAGCTAGCC	6300
GCAGGTTGCT	CAAACACTG	TTTTGAGGTT	G TAGATAGAG	CTGACGTGGT	TTGAAGAGAT	6360
TTTCGAAGAG	TATAAGCTGC	AAGATGAATG	ATTTTCTTGT	ATTGACGTTG	TTGTTGACAA	6420

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AAAGTAGCGG	ATAAATGAAA	TCCATTCCAT	TATCATAGAT	GATAGGCTGG	TAGGAAATTT	6480
TCAAATAGCA	TACAGGAAAT	AGATGTATGG	AGTTCTGGTA	GTAGAAAGGG	AGAGAGATGA	6540
ACATTTTAGT	TGCAGATGAC	GAGGAAATGA	TTAGAGAAGG	AATTGCAGCA	TTTCTGACAG	6600
AAGAGGGTTA	TCATGTCATT	ATGGCTAAGG	ATGGACAAGA	GGTCTTGGA	AAATTTCAAG	6660
ATCTCCCTAT	CCATCTCATG	GTA CTGGATT	TAATGATGCC	TAGGAAGAGT	GGTTTTGAAG	6720
TGTTAAAAGA	AATCAATCAA	AAGCACGATA	TTCTCTGTCAT	CGTCTTGAGT	GCTCTGGGAG	6780
ATGAAACTAC	TCAGTCACAG	GTATTTGATC	TCTATGCTGA	TGATCATGTG	ACAAAACCTT	6840
TTTCTTTGGT	ACTGCTTGTC	AAGCGTATTA	AGGCGCTTAT	CAGACGTTAC	TACGTCATAG	6900
AGGATCTTTG	GCGATATCAG	GATGTAACAG	TGGATTTTAC	CTCTTACAAA	GCACATTATA	6960
AAAATGAAGA	AATTGATCTC	AAACCAAAGG	AATTACTGGT	ACTAAAGTGT	TTGATTTCAGC	7020
ATAAAATCA	AGTTTAAAGT	AGAGAGCAGA	TATTGGAAGA	AATTTCAAAA	GATGTAGCTG	7080
ATTTACCTTG	TGATAGGGTC	GTGATGTCT	ATATTCGTAC	TCTTCGCAAA	AAATTAGCTT	7140
TAGATTGTAT	CGTGA CTGTG	AAAAATGTTG	GGTATAAGAT	TAGCTTATGA	TAAAAAATCC	7200
TAAATTATTA	ACCAAGTCTT	TTTAAAGAAG	TTTGCAATT	CTAGGTGGTG	TTGGTCTAGT	7260
CATTCAATATA	GCTATTTATT	TGACCTTTCC	TTTTTATTAT	ATTCAACTGG	AGGGGGAAAA	7320
GTTTAATGAG	AGCGCAAGAG	TGTTTACGGA	GTATTTAAAG	ACTAAGACAT	CTGATGAAAT	7380
TCCAAGCTTA	CTCCAGTCTT	ATTCAAAGTC	CTTGACCATA	TCTGCTCACC	TTAAAGAGA	7440
TATTGTAGAT	AAGCGGCTCC	CTCTTGTGCA	TGACTTGGAT	ATTAAAGATG	GAAAGCTATC	7500
AAATTATATC	GTGATGTTAG	ATATGTCTGT	TAGTACAGCA	GATGGTAAAC	AGGTAACCGT	7560
GCAATTTGTT	CACGGGGTGG	ATGCTCTACAA	AGAAGCAAAG	AATATTTTGC	TTTTGTATCT	7620
CCCATATACA	TTTTTGTTA	CAATTGCTTT	TTCCTTTGTT	TTTTCTTATT	TTTATACTAA	7680
ACGCTTGCTC	AATCCTCTTT	TTTACATTTT	AGAAGTGACT	AGTAAAATGC	AAGATTTGGA	7740
TGACAATATT	CGTTTTGATG	AAAGTAGGAA	AGATGAAGTT	GGTGAAGTTG	GAAAACAGAT	7800
TAATGGTATG	TATGAGCACT	TGTTGAAGGT	TATTTATGAG	TTGGAAAGTC	GTAATGAGCA	7860
AATTGTAAAA	TTGCAAAATC	AAAAGGTTTC	CTTTGTCCGC	GGAGCATCAC	ATGAGTTGAA	7920
AACCCCTTTA	GCCAGTCTTA	GAATTATCCT	AGAGAATATG	CAGCATAATA	TTGGAGATTA	7980
CAAAGATCAT	CCAAAATATA	TTGCAAAGAG	TATAAATAAG	ATTGACCAGA	TGAGCCACTT	8040
ATTAGAAGAA	GTA CTGGAGT	CTTCTAAAT	CCAAGAGTGG	ACAGAGTGTC	GTGAGACCTT	8100
GA CTGTTAAG	CCAGTTT TAG	TAGATATTTT	ATCACGTTAT	CAAGAATTAG	CTCATTCAAT	8160
AGGTGTTACA	ATTGAAAATC	AATTGACAGA	TGCTACCAGG	GTCGTCATGA	GTCTTAGGGC	8220

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ATTGGATAAG GTTTTGACAA ACCTGATTAG TAATGCAATT AAATATTCAG ATAAAAATGG	8280
GCGTGTAATC ATATCCGAGC AAGATGGCTA TCTCTCTATC AAAAATACAT GTGCGCCTCT	8340
AAGTGACCAA GAACTAGAAC ATTTATTTGA TATATTCTAT CATTCTCAA TCGTGACAGA	8400
TAAGGATGAA AGTTCCGGTT TGGGTCTTTA CATTGTGAAT AATATTTTAG AAAGCTATCA	8460
AATGGATTAT AGTTTCTCC CTTATGAACA CGGTATGGAA TTTAAGATTA GCTGTAGAC	8520
AGATTAGTTT TTTATTAAAG TTCATATAGG GTTAACATAA GTGTGTTATT CTTGTGTAG	8580
ATAAAAGAAA GGATACTAAT ATGGTATTAG CGATTATTTT AGTAACATTC TTTATTCGAT	8640
TGATTTTTTTT AAAGCGTTCG ATAGAGAATG AGAAACGAAT CCTTAGCAAT GGCGGGG	8697

(2) INFORMATION FOR SEQ ID NO: 124:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 4317 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 124:

AACCATACAT ACGGCAAGGC AAAGCTGACG CGGTTTGAAG AGATTTTCGA AGAGTATTAG	60
TTGCCCTTAA AGGCATCCAC CATCGTTTGA AATTCCTCAT TTGAGAGAGT AATCCCTTTG	120
CCCATTTTAG TATGGTCTGG ACTCCAAGCA CGAATATCAA ACTTTGCAGG GGCACCATTA	180
AAGCTCACAC GGTAAATTC CTTGGTCCAA CCTTTTTCGT TTTCAGAAAG AGTCAACAAG	240
TGCTCTTCGA TTTCAAATGT AAATCTGCC ATTTTCTTCT CCTTTTTCAG TTTCATTAGT	300
TTATTCGTAA AATCTGTAG ATTTTAGGAA AATTTTATAT AATATTGATA TAAAAGAAGG	360
GAGGCCAATA TGAGACATAA ATTCCAGCAA GTTCTAAATA AAATACATGA TTTTAAAT	420
GGATATGACC AACCTGACCA GACTGAAACC AACTCCCTTA CAGCCACTAT TGAAGAGGCT	480
ATCCAGAAAC AAACGCTGT TCACCTTATC TTGTCTGAGA CAAGCTTTAC AGGTGACATC	540
ATCAAATATG ATCAGCAAGG CCAGCAAATT ATCGTGAAAA ATTTTTCCTT AAATGTGAGC	600
CGGATTATCC GTATAAGCGA TATTCAACGC CTGCGATTG TCCCCTCAAC TGTCCAAACA	660
GCCCCAAAAA ATAGATTTAA GAAAGAGTGA GATGTAGTTG CTTTCATCCCA CTCTTTTTC	720
TTAGCGAATT TGTTCAAAAT GTAAATGAAC TGCGATATGA TCTCCATAAC CACTTCTTTC	780
CAAGTCACGT TGTAACGAT AGGAAATGTA GTGTTCTGCA ATGGTAATGT AACCTGCGCC	840
CAATAAACGA TGTTCACCA TAGATTGAAT CATACTGATA GTCGCACGTT CCACCTTGGC	900

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TTCTTGTA	AACTCCAA	CTTCTTAG	TGAGCAAG	ATTTTGAC	GCAATCATC	960
TGTCAAAACA	TAAACAGTTT	GGGCTGCCTT	CAAGATGGCT	TGGTAAATCT	TATCTGGATT	1020
AAATTCAGCA	ATTCGCCAT	TACGTTTGAT	TACTTGACATA	GGTTCTCCT	TTATTCTTTG	1080
TTTTCTTTGA	TTTCTGCCAG	CATTTTTTCT	TCTTCTACTG	TCAGTTGATA	ATGTTCAAGT	1140
AAATCCGGTC	TGCGCTCGTA	GGTTTTCTTT	AAACTCTCGT	ACAATCGCCA	CTGACGAATC	1200
TTTTTCATGGT	GGCCACTCAT	CAATACATCT	GGCACGACCA	TGCCTCGATA	ATCATAGGGA	1260
CGTGTGTACT	GAGGATATTC	TAAAAGACCT	GAAGAAAAAC	TATCATCTTG	GTGGCTAGAC	1320
TCCTTGCCAA	TCACTTCTGG	AATCAGGCGA	ACTGTAGCAT	CAATCATGGT	CATAGCTGCC	1380
AATTCCTCCAC	CAGTGAGGAC	ATAGTCACCT	AGGAAATCT	CATCTGTTAC	CAAGGTCTTA	1440
ATGCGCTCAT	CATAACCCTC	ATAGTGCCCA	CAGATAAAGA	TTAGCTCTTC	CTCTTGAGCC	1500
AAATCTTCAG	CATAAGCCTG	ATCAAACCTG	TTTCCAGCAG	GATCAAGGAG	AATAACGCGC	1560
GGATTTTTCT	TTTCAATAGC	ATCAAAGGAA	TCGAAAATAG	GTGTGCTCT	GAGCAACATG	1620
CCCTGACCGC	CTCCGTAGGG	CTCATCATCT	ACATGACGGG	CCTTTTCAGC	ATTTTCTCGA	1680
AAATTATGAT	ACTGGATATC	CAAGAGCCCT	TTTCTCGAG	CCTTTCCAAC	GATTGAGTGC	1740
TCCAGTGGAG	AAAACATCTC	TGGAAAGAGG	GTTAAATAT	CAATCTTCAT	CGTCTAACCC	1800
TTCTAAGATT	TCCACATCGA	CCCGTTTACT	TGGAATATCA	ACATTGAGAA	CCACTGGTGG	1860
GATATAAGGT	AAAAGCAAAT	CACGTTTGCC	TTTTCGTTTG	ACCACCCAGA	CATCATTAGC	1920
ACCTGGTTGC	AGGATTTCTT	TGATGGTTCC	AACCAAGCTA	TCACCCCTCAT	AGACTTCCAA	1980
ACCGATAATC	TCGTGATAGT	AAAATTCACC	ATCGTCTAGG	TCATTCAAAT	CTTCCTCAGC	2040
GACCTTGAGA	CTGTATCCCT	TGTACTTTTC	GATAGTATTG	ATATGGTACA	TATCTTTGAA	2100
TTTAATAATG	TCAAAGTTCT	TCTGTTTACG	GTGGCTAGCG	ATGGTCACTG	TTTGGACAAA	2160
CTGATCTTTT	TCATCAAACA	AAACCAGCTC	AGCTCCTTTT	TTAAACCGTT	CTTCTGCAAA	2220
ATCCGTCACA	GACAAGACTC	GCATCTCCCC	CTGTAATCCC	TGCGTATTAA	CGATTTTCCC	2280
AACATTAAAG	TAGTTCATCT	TGTCTCCTGT	AATCTCCTTT	TTTCCATCTT	ATTCTAACAA	2340
TTCTCGAATA	ATAGCCGCAA	TTTTTTCCGA	TTCTGACCAT	TGTAAATAAT	GGTGATTCCC	2400
TCCTAAAATG	AGTTTAGTAT	TGGAAGTCCA	ATATCTGAT	TCTCTGTACT	CTTTTTCTCT	2460
ATAAGGCTGA	CAAAAAACAA	ATACAGGAAT	ATGAGCTTCT	ATAGATACAT	CCTCAAAATC	2520
TTCTCAGTA	ATCTCTCCAG	ATATCTGAAA	TTCTGGATCT	TGATTTTCCA	ACTCTAAGCC	2580
TTTTTCTTGC	ATTAATTCCC	AGATTTTTTT	ATTCGTTTCA	GGACTAAATG	TTGCTTGAGT	2640
TAAGTTCTTA	AAATAAAGTT	CAGGACCACA	CTCGTCAATC	AGCCTCATCT	GCTCTTCCAT	2700



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TTCTGGATAA	GGATTTTCTG	AAAAATCAGC	AAACATGACT	TTTTTAGTTG	TCGGTTCAAT	2760
TGCTACTAAA	GTCTGACGCT	TAATTGGTTT	CTCGAGTAAT	TTGCAAGCTA	AAATTCCTACT	2820
CCAACTATGT	GCACAAAGTA	TATATTCAGA	AATTCCTAAT	TCTTCAAGTA	CTTCATAAAC	2880
CGCATCTGCA	AGATTATCTA	GATTTTTTCC	AGCTTGGTCA	TGAATCGGAC	TCCTACCTGT	2940
GTTCGGAAAA	TCAATTGTCA	AATAACCAAT	TGTAGGAGGA	GGTTTTTCAA	GTATAAGTGA	3000
AAAATTTTCA	TAACTTGGTA	GCAAACCTGC	TCCGTTTAAA	CAAACCTAGCA	CTTCTCTTTG	3060
CTTTTGATAA	GTAACAGAGA	GGCTACCAAT	TTCTGTAGAT	ACTTCAAACC	TCTTCATAAA	3120
GAAATCCACT	GATTCTATAT	AATGAATTAT	TAAAAATCCT	TATCCTTTAT	TTTATCACGT	3180
TCCAAGGATT	TTCTCAAGTT	GGAGGAAGGG	GACAATATCT	CTACTTTCCC	TTCAATAATC	3240
CTTCCAAATT	ATGTTTATGT	TGGTAATTAA	TGGCTGCGGT	TTTGTCTTTC	TCAAAGACAG	3300
TCTTGGTAA	GTCAATATGA	TTAATAGCTA	CGATTGCGAC	GGTGTAGTAA	ATGATATCAG	3360
CCAGTTCTCT	GGCAAGTTCC	TCGTTTCAAT	CCTATCCCTT	CTTTTCGACC	AGAGCGCCTA	3420
TTCAAAACCT	CGACTACTTC	TCCGACTTCC	TCCACTAACT	TCATAAAGAG	ACCTTCATCA	3480
GTCCGAGACT	GCTGTTAATG	TTGATTAAG	TAGTCTTGA	ATTGCCTAAA	CGTTCATCT	3540
TTTATAGTAT	ATTGAACTA	GAATAGTACA	CCTTTACTTC	TAAAACATTG	TTAGAAATCG	3600
ATTTGACTGT	CCTGATCGAT	TTGTCCTGTT	CTTGTTTCAT	TTTACTATAT	CTTCTATTCC	3660
ACACAAAAAA	GCGAGACATC	CGTCCCGCCC	TTCTTATTTT	TCGTCAATAA	CGATTCTTAC	3720
TTTTTTGTAT	TCAGTTGGGA	CAGAGTAGAC	AATCGTCTT	ATCGCAGAAA	TAGTGCAGAC	3780
CTTACGACCG	ATTACACGAC	CCACATCGCT	TTGATCAAGA	TTCAAATGAT	ATTCCAAAAA	3840
TTCTGGTGTA	TCCTCAATCT	TGATAGTTAA	GGCATCTGGT	TGTGAAATTA	AGGGTTTCAC	3900
AATCGCAATA	ATGAGATTTT	CAATCGTATC	CATCTGTCAA	CCTACTTTAA	ACTTATTTTG	3960
AAAATTTAGA	ATCGTGGAAT	TTTTTCAATA	CGCCTTCTTT	TGAAAGGATG	TTACGTACTG	4020
TGTCTGAAGG	TTGAGCTCCA	TTAGCCAACC	ATGCAAGAAC	GCGGTCTTCT	TTCAAAGTTA	4080
CTTGGTTTTC	AGCAACAAGT	GGTTTGTAAG	TTCCAACGTG	TTCGATGAAA	CGTCCGTCAC	4140
GTGGTGAACG	TGAATCTGCT	ACGTTGATAC	GGTAGAAAGG	TTTTTTCTTA	GAACCCATAC	4200
GAGTCAAACG	GATTTTAACT	GCCATTTTAA	AAGTCTCATT	TCTTTAATTT	TTTATTTCCG	4260
TGAAATAGCT	GAGCTATTTA	GCACATGTTC	TATTATAGCA	GATTTCTGGC	ATGTGTC	4317

(2) INFORMATION FOR SEQ ID NO: 125:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 4881 base pairs

866

(B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 125:

AATTTATTTG ACTGGAAATT GTAGAGGGTT CTCGAAATTT CTTGAATGGT TAAAATAAGG	60
ACAAGAGAAA ACATGGATAT CTATATCCTT GTGCCAAAAA AACCCTGCC CTCCCAGAC	120
CAACCTGAGG AAAGCAGTGA TTCCTATTTT AGGAGTTAGG AATGAATACA CGAAATCAAT	180
TTAGCTGATT ATTTTTTGTT TTTCAAGAAT TCATCGTATT GTTTTTCAT TTCGTTCAAT	240
ACTTTTTCGT AGGCACCTTC AGATTTCAT TTTTCCATCA ATTCTGGAAT CGCTTTATCT	300
GGGTCTACAG TACCAGTGTT GATAGCTGTA TCAAATTGTT GCATTGTGTT AGCAATAGCT	360
GAGATTTTCAG ATTTACACAT GTCAGTATTG AAGATAAATC CAAGCGCTGG AGATTCCTTTA	420
GCTTCTGCCA ATTCCTTCTT AGAATTTTCG ATTTGTTGGT CTGTAACGTT TTCGTTGATG	480
TAAAGGATCC AGTTGTTACC AGTGTTCAT CCACCCATGT GAGTGTTCCT TTTGTAGCCA	540
TCAAGAACGC GAACACGGTT TTCCTTACCT TCAATTTTTT CCCAGTCTT GCCTTCTGGA	600
CCGTAAACAA GACCGTTCAA GAGTCTGGG TTCGTATTCA AGAGTTCAA GATTTCATT	660
GATTTTCTT TGTCTTAGA GTTGTTGAG ATGACAAAGT TAGCAACTTG TGTGTTTG	720
TTTTTCTTGA TGAAGTAGT AATTGGTTT ATTTGGATAT CTTTGTGGC AACACGTGAA	780
AGCAAGCTGT TACCGTAGTC AGCTGGTCCT ACTGTTCTT CACGAACGAA CCAAGTATCT	840
TGTTGAAGGT CAAAGGAAGT ATCGCTTGT GCGACGTCTT TTGGAATGTA GCCAGCTTCA	900
TAGAATTTGT GAAGAGTCTT CAAGTGTCTT TTGAAACGAG GCACTTCGTA ACGGTTTACA	960
ACTTTAGTAG TATCGCCTTC AAGGTCGATA ACGAATGGAA GACCGTTTGC TACTGGGTAG	1020
TCAAATTAT CAGATGGGAT GAAAACCTTA CCAATAGCAA ATGGTACTAC GTCTGGAGCT	1080
TTTCTTTTGA TTTGTTTCAA GACTGGCTCA AGAGTTTCGT AAGAAGTAAC ACCTGAAATA	1140
TCGATACCAT ATTTAGCAAG GAGAGTTCCG TTGAAGGCAA AGTTTGTAGA TGATGCAACG	1200
TTGGCTGCAA CTGGAACAGC GTAAATCTTA CCATTTACAG TATTACCCTT GATGTAAGCT	1260
GGTCAAGTG CTTTGTAAG GTCTTTACCT TCTTTTTTGT ACAATTCTGT CAAGTCAGCG	1320
TAAGCACCTT TTTGAGCATT TACAATATAG TTAGCTGCAA AGGCAATATC ATAGTTTCA	1380
CCAGATGATG TGATAACTGA CATTTTCTTA CCATAGTCAC CCCAGCCAAG GTATTGGATA	1440
TCCAATTTGG CACCAACTTT TTCTTCAATG ATTTTGTGG CATTTGCTAA CAATTCATCC	1500
AAGTTGTCTG GTTGTGACC GATTGGTAC ATTTTGATAA CAGGTTTGTC ACCTGAATCA	1560

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GCAGCTTTTT	TGCTGTTACC	TGTCAAATTT	CCACAAGCAG	CAAGACCTGC	AGCCAGAGCG	1620
ACTACACTAG	CAGATGCAAA	AGCATATTTT	TTCCAGTTTT	TCATGATAAA	AATCCTTTT	1680
TTTATTTTTA	AACTTATAAA	CAATGTAATG	ATCTTATACT	CAATAAAAAT	CAAAGAGCAA	1740
ACTAGAAAAC	TAGCCGCAGG	CTGCTCAAAG	CACTGCTTTG	AGGTTGTAGA	TAAGACTGAC	1800
GAAGTCAGTT	ACATATATCT	ACGGCAAGGC	GACGTTGACG	CGGTTTGAAT	TTGATTTTCG	1860
AAGAGTATTA	ACTTCACACA	AGGGAAGTTG	GGAAGTGAAG	AATGTTATTT	CTCAATAAGC	1920
ACTATCTTTT	CACACCACCG	ATAGTCAAAC	CTTTTACAAA	GTAGCGTTGG	AAAAATGGAT	1980
ACAAAATCGC	GATTGGAAGG	GTTGCAACCA	CAACCATGGC	CATACGACCT	GTTTCTTTTCG	2040
GTAGAGCAAC	TCCCAGTTGA	CCAATCAAGC	CGACCGCTTT	GGCAATGTAG	TCCATATTTT	2100
GTTGGATTTG	CATGAGCAAA	TATTGCAATG	GATACAAGTT	GTCACCTTTG	ATGTAAAGAA	2160
GGGCGTTGAA	CCAGTCATTC	CAGAAACCAA	GAGCTGTTAA	GAGCGTGATG	GTTGCGATAC	2220
CTGGTAGTGA	CAATGGCAAA	CAGATTGGA	AGAAAATCCG	GGCCTCACTG	GCACCATCGA	2280
TACGAGCCGA	TTCTAGAATG	GCTTCTGGAA	TGGTCTTCTT	GAAGAAGGAA	CGCATCAAGA	2340
TGATGTTAAA	TGGTGAGAGA	AGCATTGGAA	CAATCAAGGC	CCAAACAGTG	TCACCAAGCT	2400
GAAGTACACG	GGTCACCATG	ATATAACCTG	GTACCAAACC	AGCGTTGAAC	AACATACTGA	2460
GAAGGACGAA	GATGGTAAAG	AATCTGCGAT	ACTTAAAGGT	TGTCCGTGAA	ATAGCGTAGG	2520
CATAGGTTGT	TGTGATAAAG	ACATTTGTCA	ATGTCCCAAC	TACGGTTACA	AAGACAGAGA	2580
TGAAGAGGGC	TTGTAGGATT	TTATCCTTAA	ACTGTGCCAA	AAACTCAAAA	CCGTCTAAGC	2640
CAAATGCGGA	TGGGAAGAAG	CTATAGCCGT	ATTGGAGGAG	GCTTTTCTCG	TCTGTCACTG	2700
AAATAATGAT	AACGAATACA	AAAGGTAGGA	TACAAGAGAG	GGCAATCAAA	CCCGAAATGA	2760
TACTGAAGAA	GATATCTGCT	TTCTTACTGA	AGGAGTGAAT	GCCGACATTA	TCAATTTTTT	2820
CTTTTTTAAT	TTTCTTTTTT	GCCATATTCT	CCTCCTTTCT	AGAACAAAGC	TGAGTTTGGA	2880
TCGACTCGTC	TTGCAAGCAA	GTTTGATAGG	ATAACCAGAA	TCAAACCAAC	AACGGATTGG	2940
TAAAGACCGG	CTGCTGCAGC	CATACCGATA	TCTGCTGTCT	GAGTCAAACC	ATTAAAGACA	3000
TATACGTCCA	AAACGTTGGT	TACATTGTAA	AGCTGACCAG	CATTGTGTGG	GATTTGATAG	3060
AAGAGACCGA	AGTCTGCGCG	GAAGATATTT	CCGACTGCAA	GGATGGTCAA	TACAGTTACA	3120
AGCGGAGTCA	ACTGAGGAAT	GGTTACGTTG	CGAATACGTT	GCCACTTGCT	AGCTCCGTCC	3180
ACTGTCGCTG	CTTCGTAGTA	GGTTGGATCA	ATTCCCATGA	TCGTCGCATA	GTACATGACA	3240
CTGCTATATC	CAAAGCCTTT	CCAAATACCT	AGGAAAAGTA	GGAGATAGGG	CCAGATGCCC	3300

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AGGTCAGCGT AGAAATTGAC TTCTTTGAGA CCAAGACTTT CCAATAGATG ATTGAACACC	3360
CCTTTATCAA TATTTAGGAA GGCATCTGTA AAGAAACTGA TGATAACCCA AGACAAGAAG	3420
TAAGGGAACA ACATAGAAGT TTGAAAAATC TTCACCATTTC TCTTAGAACG GAGCTCGCTG	3480
AGGATAATGG CAATCCCTAC AGATACAACCT AAACCTAGAA AGATAAAGCC AAGATTGTAG	3540
AGGACAGTAT TTCGTGTGAT AATAAAGGCG TCTCTTGAAC TAAATAAGAA TCTAAAATTA	3600
TCGAGTCCGA CCCATTTACT ATTTATGATA CTATCTATGA AACCATTACT GGTCATGTGG	3660
TAGTCTTTGA AGGCAACCAC GTTCCCAAAT ACTGGAATGT AAAAGAATAG AATCAACCAG	3720
AGTGCCCCTG GCAAAACCAT CAAGAGAAAG ATCCAGTTGT CTCTCAATGT TTTTGAAAAC	3780
TTTTTCATAA TTTCCTCCCT TTTTATTTTG ATATCCATCT AAAAATTCTT TTTTAGACTT	3840
TTGATAACGA TTACATTATT AGTATACTCC TATTTGCAGG TTAGGTAA CTCTAATTA	3900
TAGAAAAAC TCCACAAAT ATGTAGCAGA TTTAAACTT TATCACCCT ATCAAACAA	3960
TGTCCTAAAT CAATGTGTTA TTTTATCTCT ATTAGCCCAG TGATGGCGTC ACTCTGTTAT	4020
AAGCATCCAA CAACGGGGTA TACTGAAAA TCTCCAGACT AGGGAACCTCA GCGATAGTTC	4080
CTAATCTGGA GATTTTAAAT ATGTTATTAG GCGTTTGCTT TCAACTTAGC AATAACCTCT	4140
TTAAGATTAT CAATCAACTC TGCTGCAGTA TGCTCAGAGC CTTTTTCATC TGCCAAGAAC	4200
AAACTGCTT TTTGAAGTTC TTTTGAGAG TTTTCAAGGA CATCCTTATC TACTGTTTCA	4260
AGGTTTGAGT CTTAAGAAG TTTACTTAAT TCCTTGGCTA ATTTCTTGAG TTTGATTTGC	4320
AGACTCATCT TCTCCTGCTG TTTCTTTGCC CGCTGTTTGT CCTCCATCCT TAGTTGCTGA	4380
CTGGCTTTCC TTAATGGACT CTAGGGAAGC AATGGCATCT TTGACTGTTT GCAAGATATC	4440
ACGTAAACCT TGCTCTGTCA AACTATCATC TGCAAAAGCT TTATTAGCCT CTGCCAAAAC	4500
CAGACGTGCT GAATCTGTGG TAGGATTCGA TACACCTGTC AATGATCTCA AAAGATTTTC	4560
TAAGGTTTGA GTCTGCTTAC TAATACTAGA CTAAATCAA AAAGTATTAT ATAACAGTGA	4620
TATGAAATCA ACTAAAGAAG AAATCCAAAC CATCAAAACA CTTTAAAAG ACTCTCGTAC	4680
AGCTAAATAT CATAAACGCC TTCAAATCGT TCTATTTTGT CTGATGGGCA AATCTTATAA	4740
AGAGATTATA GAACTTTTAT AGTAGTTTGA AATAAGATGT GAACATCTCT ATCAGGAAAG	4800
TCAAATTAAT TTATAGAAAT ATTTAGCAG CCAAGGTGTA CTGTTATAGA TTCAATACAC	4860
TATACTTGGT GGTTTAGCTC G	4881

(2) INFORMATION FOR SEQ ID NO: 126:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 13121 base pairs
  - (B) TYPE: nucleic acid

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(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 126:

AGGATCCCCG GAAAAGGAGA CTAAAAATGA AGAAAAAATT TCTAGCATT T	60
TATTCCCAAT TTTCTCATTA GGTATTGCCA AAGCAGAAAC GATTAAGATT GTTCTGATA	120
CCGCCTATGC ACCTTTTGAG TTAAAGATT CAGATCAAAC TTATAAAGGA ATTGATGTTG	180
ACATTATTAA CAAAGTCGCT GAGATTAAAG GCTGGAACAT TCAGATGTCC TATCCTGGAT	240
TTGACGCAGC AGTCAATGCG GTTCAAGCTG GGCAAGCCGA CGCTATCATG GCAGGGATGA	300
CAAAGACTAA AGAACGTGAA AAAGTCTTCA CCATGTCTGA TACTTACTAT GATACAAAAG	360
TTGTCAATGC TACTACAAAG TCACACAAAA TTAGCAAGTA CGACCAATTA ACTGGCAAAA	420
CCGTTGGTGT TAAAAACGGA ACTGCCGCTC AACGTTTCCT TGAAACAATC AAAGATAAAT	480
ACGGCTTTAC TATTAAAACA TTTGACACTG GTGATTAAAT GAACAACAGC TTGAGTGCTG	540
GTGCCATCGA TGCCATGATG GATGACAAAC CTGTTATCGA ATATGCCATT AACCAAGGTC	600
AAGACCTCCA TATTGAAATG GATGGTGAAG CTGTAGGAAG TTTTGCTTTC GGTGTGAAAA	660
AAGGAAGTAA ATACGAGCAC CTGGTTACTG AATTAAACCA AGCCTTGTCT GAAATGAAAA	720
AAGATGGTAG TCTTGATAAA ATTATCAAGA AATGGACTGC TTCATCATCT TCAGCAGTGC	780
CAACTACAAC TACTCTCGCA GGATTAAAAG CTATTCCTGT TAAGGCTAAA TATATCATTG	840
CCAGCGATT CTTCTTTGCC CCTTTTGTTC TCCAAAATTC AAGCAACCAA TACACTGGTA	900
TTGATATGGA ATTGATTAAG GCAATCGCTA AAGACCAAGG TTTTGAAATT GAAATCACCA	960
ACCCTGGTTT TGATGCTGCT ATCAGTGCTG TCCAAGCTGG TCAAGCCGAT GGTATCATCG	1020
CTGGTATGTC TGTACAGAT GCTCGTAAG CAACTTTTGA CTTCTCAGAA TCATACTACA	1080
CTGCTAATAC CATCTTGGT GTCAAAGAAT CAAGCAATAT TGCTTCTTAT GAAGATCTAA	1140
AAGGAAAGAC AGTCGGTGT AAAAACGGAA CTGCTTCTCA AACCTTCCTA ACAGAAAATC	1200
AAAGCAAATA CGGCTACAAA ATCAAAACCT TTGCTGATGG TTCCTCAATG TATGACAGTT	1260
TAAACACTGG TGCCATTGAT GCCGTTATGG ATGATGAACC TGTCTCAAA TATTCTATCA	1320
GCCAAGGTCA AAAATTGAAA ACTCCAATCT CTGGAAGTCC AATCGGTGAA ACAGCCTTTG	1380
CCGTTAAAAA AGGAGCAAAT CCAGAACTGA TTGAAATGTT CAACAACGGA CTTGCAAACC	1440
TTAAAGCAAA CGGTGAATTC CAAAAGATTC TTGACAAATA CCTAGCTAGC GAATCTTCAA	1500
CTGCTTCAAC AAGTACTGTT GACGAAACAA CGCTCTGGGG CTTGCTTCAA AACAACTACA	1560

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AACAACCTCCT	TAGCGGTCTT	GGTATCACTC	TTGCTCTAGC	TCTTATCTCA	TTTGCTATTG	1620
CCATTGTCAT	CGGAATTATC	TTCGGTATGT	TTAGCGTTAG	CCCATACAAA	TCTCTTCGCG	1680
TCATCTCTGA	GATTTTCGTT	GACGTTATTC	GTGGTATTCC	ATTGATGATT	CTTGCAGCCT	1740
TCATCTTCTG	GGGAATTCCA	AACTTCATCG	AGTCTATCAC	AGGCCAACAA	AGCCCAATTA	1800
ACGACTTTGT	AGCTGGAACC	ATTGCCCTCT	CACTCAATGC	GGCTGCTTAT	ATCGCTGAAA	1860
TCGTTTCGTG	TGGTATTCAG	GCCGTTCCAG	TTGGCCAAAT	GGAAGCCAGC	CGAAGCTTGG	1920
GTATCTCTTA	TGGAAAAACC	ATGCGTAAGA	TTATCTTGCC	ACAAGCAACT	AAATTGATGT	1980
TGCCAAACTT	TGTCAACCAA	TTCGTTATCG	CTCTTAAAGA	TACAACTATC	GTATCTGCTA	2040
TCGGTTTGGT	TGAACTCTTC	CAAACGGTA	AGATTATCAT	TGCTCGTAAC	TACCAAAGTT	2100
TCAAGATGTA	TGCAATCCTT	GCTATCTTCT	ATCTTGTAAT	TATCACACTT	TTGACTAGAC	2160
TAGCGAAACG	CTTAGAAAAAG	AGGATTCGTT	AATGGCAAAA	TTAAAAATTG	ATGTAAATGA	2220
TTTACACAAG	CACTATGGAA	AAAATGAAGT	CCTAAAAGGA	ATTACGACTA	AGTTCTATGA	2280
AGGAGATGTT	GTGTGTATCA	TCGGTCCTTC	AGGTTCTGGT	AAGTCAACTT	TCCTCCGTAG	2340
CCTCAATCTT	TTAGAAGAAG	TCACTAGCGG	TCACATCACT	GTGAACGGCT	ATGATTTAAC	2400
TGAAAAAACA	ACCAATGTTG	ACCACGTCGG	TGAAAAATATC	GGCATGGTAT	TCCAACACTT	2460
CAACCTCTTC	CCTCATATGT	CTGTATTGGA	CAACATCACC	TTTGCTCCTA	TTGAGCACAA	2520
GTTGATGACT	AAGGAAGAAG	CTGAGGAATT	GGGAATGGAG	TTGCTTGAAA	AGGTTGGACT	2580
AGCAGATAAA	GCTAATGCCA	ATCCAGATAG	CCTATCAGGT	GGTCAAAAAC	AACGTGTGGC	2640
CATCGCTCGT	GGCCTAGCAA	TGAATCCAGA	CATCATGCTC	TTGATGAAC	CAACTTCTGC	2700
CCTTGACCCT	GAGATGGTTG	GAGACGTACT	TAACGTTATG	AAGGAATTGG	CTGAGCAAGG	2760
CATGACCATG	ATTATCGTAA	CCCATGAGAT	GGGATTTGCT	CGTCAGGTTG	CCAACCGCGT	2820
TATCTTTACT	GCAGATGGCG	AGTTCCTTGA	AGACGGAACA	CCTGACCAA	TCTTTGATAA	2880
CCCACAACAC	CCTCGTCTGA	AAGAGTTCTT	AGATAAGGTC	TTAAACGTCT	AAACTCAAAC	2940
TGTAAGGATT	TCCTTGCAGT	TTTCTACCT	CGTATTGGAA	TTTTTGATTT	TTCGGAAAAAT	3000
TATGTTAGAA	TTAAGTTTAT	GAAATGAGGT	TTCTTCATAC	CTAGCAAGAC	TAGGAATAAA	3060
AATAGAAATT	AGGTAGCTAG	ATGTCATCTA	AGGTTATTGT	TACAATTTTC	GGTGCGAGTG	3120
GAGACCTGGC	TAAACGCAAG	CTCTACCCTT	CCCTTTTGTAG	ACTATATCAA	TCCGGCAATC	3180
TTTCCAAGCA	CTTTGCCGTT	ATTGGAACGT	CCCGTAGACC	TTGGAGTAAG	GAATATTTTG	3240
AATCTGTAGT	TGTCGAGTCC	ATCCTTGATT	TGGCAGATAG	TACCGAGCAA	GCCCAAGAAT	3300
TTGCTAGCCA	CTTCTACTAT	CAAAGCCATG	ATGTCAATGA	TTCGGAACAT	TATATTGCTT	3360

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TGCGTCAATT	ACAAGCTGAG	CTTAATGAAA	AATACCAAGC	TGAACACAAT	AAGCTCTTCT	3420
TCTTGTCTAT	GGCACCTCAG	TTCTTTGGAA	CCATTGCCAA	ACACCTCAAA	TCTGAAAACA	3480
TTGTGCGATGG	CAAAGGTTTT	GAGCGCTTGA	TCGTTGAAAA	ACCATTTGGT	ACAGATTACG	3540
CAACTGCAAG	CAAGTTGAAT	GACGAACCTC	TAGCAACATT	TGACGAAGAA	CAAATTTTCC	3600
GTATCGACCA	TTATCTTGGT	AAGGAAATGA	TCCAAAGCAT	CTTTGCAGTT	CGCTTTGCAA	3660
ACTTGATTTT	TGAAAACGTT	TGGAACAAGG	ATTTTATCGA	CAATGTTCAA	ATTACCTTTG	3720
CGGAGCGCTT	GGGTGTAGAA	GAACGTGGTG	GCTACTATGA	CCAATCCGGT	GCCCTCCGTG	3780
ACATGGTCCA	AAACCACACT	CTACAAC TTC	TTTCGCTCCT	CGCCATGGAC	AAACCAGCAA	3840
GCTTCACAAA	AGACGAGATT	CGTGCTGAAA	AGATTAAGGT	CTTTAAAAAC	CTCTATCATC	3900
CAACTGATGA	AGAACTCAAA	GAACACTTTA	TCCGTGGGCA	ATACCGCTCT	GGTAAGATTG	3960
ATGGCATGAA	ATACATCTCT	TATCGTAGCG	AGCCAAATGT	GAATCCAGAA	TCAACAAC TG	4020
AAACCTTTAC	ATCTGGTGCC	TTCTTTGTAG	ACAGCGATCG	ATTCCGTGGT	GTTCCCTTCT	4080
TTTTCCGTAC	AGGTAAACGA	CTGACTGAAA	AAGGAAC TCA	TGTCAACATC	GTCTTTAAAC	4140
AAATGGATT C	TATCTTTGGA	GAACCACTTG	CTCCAAATAT	TTTGACCATC	TATATTCAAC	4200
CAACAGAAGG	CTTCTCTCTT	AGCCTAAATG	GGAAGCAAGT	AGGAGAAGAA	TTTAACTTGG	4260
CTCCTAACTC	ACTTGATTAC	CGTACAGATG	CGACTGCAAC	TGGTGCTTCT	CCAGAACCAT	4320
ACGAAAAATT	GATTTATGAT	GTCTTAAATA	ACAACTCAAC	TAACCTTAGC	CACTGGGATG	4380
AAGTTTGTGC	GTCATGGAAG	TTGATTGACC	GTATTGAAAA	GCTCTGGGCT	GAAAATGGTG	4440
CCCCACTTCA	TGACTATAAA	GCTGGAAGCA	TGGGACCTCA	AGCCAGCTTT	GACCTACTTG	4500
AAAAATTCGG	TGCCAAATGG	ACTTGGCAAC	CAGATATCAC	CTATCGTCAA	GATGGTCGCT	4560
TAGAATAAAA	AAATTTCC TG	CAAGTTTATG	CcTTGCAGGA	TTTTTGCTTC	TGATTAGATT	4620
AAACCTTCCA	AGAGACCTTT	CATAAAGTTT	TCTGAGTTAA	ACTCTCCAAT	ATCATCGATT	4680
TTTTACCAA	AACCAATCAA	TTTTACAGGA	ATATTGAGTT	CTTCACGAAT	GGCTAGAACC	4740
ACACCTCCTC	GAGCAGTTCC	ATCAATCTTA	GTCAAAACAA	TTCCCGTTAA	AGGTGTGATT	4800
TCGAAAAATT	CTTTGGCCTG	TACTAGGGCA	TTTTGACCTG	TTGATGCATC	AAGTGCCAAG	4860
AAGGTTTCAT	GTGGTGCTTC	TGGCACAACA	CGTTTGATAA	TACGACCAAT	CTTTTCCAAC	4920
TCAGCCATAA	GGTTATCCTT	ATTTTG CAGA	CGACCAGCAG	TATCAATCAT	GAGAATATCG	4980
ATACCTTCAG	TCACGGCACG	TTCCATACCA	TCAAAGACCA	CGCTGGCTGG	ATCAGCTTTT	5040
TCAGGTCCAG	TTACTACTGG	AACATCTACT	CGTCGGCCCC	ATTCAGCTAG	CTGAGCTACT	5100

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GCACCCGCAC	GGAAGGTATC	TGCTGCAACC	AGCATGACCT	TCTTACCAGC	TTGTTTGTAG	5160
CGGTGGGCTA	GTTTTCCGAT	AGAAGTTGTT	TTCCCAACAC	CATTACACACC	AACAAAGAGC	5220
ATAACTGTCA	AGTTATCTTG	GAAGTGGAATG	CTTTCATCGT	AGCTACCATC	CTTTTCATAA	5280
AGCTCAACCA	ATTTCTCAAT	GATGACACGA	CGAAGTACAT	CAGGTTTCTT	GGCATTTTCA	5340
AGCTTGGCTT	CGTAACGTAG	TTCTCCGTT	AAGTTAGAAG	CGACTTGGAC	ACCAACATCA	5400
CTCATAATCA	GCAGTTCTTC	CAGTTCCTCG	AAAAATTCTT	CGTCAACAGA	GCGGAAGTTA	5460
GCAAAGAAGG	CATTCAAGCG	GGCACCGAAA	CCTGTGCGAG	TTTTCTTAAG	ACTGCGGTCA	5520
TATTTTTCCT	GAACAGTTTC	TTCTGTTTGA	GGAGCTTCTG	GTTCAAGCAC	TTCAGAATTA	5580
TTTTCTTCTA	CAGTTCCTTC	GTGCTCAAGC	TTCTCTTCCT	CTGGTAATTC	TTCTGAGTTT	5640
GGTAATTCTT	CTATTCTTTC	TTGAGAAACC	CCTACAGCTG	GCTCTGAATC	CTGACTTTCT	5700
TCAACTGTGT	CTTGGATTTC	CTCTTCTTGG	AACACAGCTT	GTTCAACAAT	TTCAACCTCT	5760
GCTTCTTCCT	GAGAACTTC	CTCAACTTCT	GTGAAGGTAG	GATCAACATC	TTCAGACAAA	5820
TCAAGATTTT	CCAGAGCTTC	TTTTACAAC	TCTTCGATTT	TAGGTCTTTC	TTTTTTTCCG	5880
AATAGACGGT	CAAACAATCC	CATATCTTAG	TTCTCCTTTA	GCACATATTC	TTCGATAGCC	5940
CAGGCGACAG	CTTCCTCATC	GTTGGTCATC	GGCGTCACTA	CATTGCGGC	TGCCTTTACT	6000
TCAGGAACAG	CGTTTTCAT	AGCAACACCA	AGACCTGCCC	ATTCAATCAT	AGAGAGGTCA	6060
TTGGCCTCGT	CACCACAAGC	CATCACTTGA	CTTTGGTCGA	TTCCAAGATG	GCTGATTAGT	6120
TTTGCCAAAC	CTGTTGCTTT	ATGAACATTC	TTTGGTGACC	ATTCTAGCAA	CATTTACAGT	6180
GATTTAAAGA	TTTCATATTG	GTCAAACAAT	TCTGGAGAAA	TCTTCTGAAT	GGCTGCATCC	6240
AAGGGTTCTT	GAGCAAAGGC	AGTCACGCAT	TTGTTGTAGG	TCATTGACT	AGATAAGTCT	6300
TCAAAGTCCA	CTGGAACAAA	GGTCAAAGCT	GGATTGAATT	TGGCATAAAG	ACTTCTTGG	6360
TCCGATTGGA	TTTGATAAAC	TGTTCCCTTCT	GAGATGGCAT	CAAGAGGCAG	TGATAATTTT	6420
TCTGTTTCTT	CATACAAACG	TGCCACATCA	TCATATGAAA	AGACTGTTTT	ATCAAGGATT	6480
TCTCCTGTAT	TTTTCTGAAC	TAATCCACCA	TTAAAAGTAA	TGGTATACTC	ATCTTCCTGA	6540
CCGTCAGTCC	CTAACTCATG	GAGAAAGAAA	TCCATGGCTT	TTAAGGGACG	ACCAGTTGTC	6600
AATACGACCT	TGATACCACG	ATCACGCGCA	gCTTGCAAGG	TTTCCTTGGT	ACGATCCGTC	6660
AGCCTTTTAT	CAGTAGTCAG	CAAGGTCCCG	TCCAAGTCCA	ATGCAATCAA	TTTTATATCT	6720
GCCATTATAA	GCCCTCCATA	TAAGCTATAA	CCGACCGTTC	CTTATGGTGA	CCAATCACAG	6780
TCTTTGCTAA	TTCTAAAATT	TCAGGTCGTG	CATTTTCAGG	AGCTACAGGA	TGTCCACAAA	6840
CCTGCATCAT	ATGTAAGTCA	TTAAGATTGT	CTCCAAAAGC	CATGACCTGA	TCCATTGTGA	6900



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TACCAAGTTT	TTTAACTAAT	TCAACAATGG	CCACTCCCTT	ATCGACATAG	TCCAGAACAA	6960
TATCAATGGA	TTCAAAGCCA	GTGTGCATGG	CCTTAACACC	AGGAACGTTT	TCGTTTACCC	7020
AAGCCTCCCC	ATCTTCCAGC	GTTTCTTCTG	TGAAGTTGGT	TGTAAATTTG	AAAATGTCAT	7080
CTGTGATATC	TTCCAAACTC	GCTACTTTTT	GGATATTTTC	ATTATAGTGC	TGACTCACTT	7140
TCAAATAGGT	CTCATCAACC	GTATCTAGAA	CATATGAACC	CTTCTTACCC	GTCAAGAGCA	7200
GTTTATTGAT	ATCTACATAA	GGTGAAGTTT	TCAGCTTTTC	AAAAGTTGCC	AGATAAAAGT	7260
CACGAGACAT	AGTCGCTTCA	TACAAGTCCT	GACCTTGATA	CTCTACCAA	CTGCCATTTT	7320
CCCGCATGAA	AATAATGTCA	TCACGAACAC	CAGCAAATAA	TTTTTCTAGA	GACAGAAATC	7380
CCCGACCCGA	AGCTACCGCA	AAGTAAATCC	CTTTTTCCTT	GTAGGAAACC	AAGAGAGACT	7440
TGAGACGATC	CATATCAAAG	CGTCCATTCC	CATCTAGGAA	GGTCCGTCC	ATATCCGTTG	7500
CTACTAGTTT	AATTGTCAFC	CTCAATACT	TTCTAAATCT	TTTAACTTAA	CTGAAACAAT	7560
CTTTGAAACA	CCCGATTCTT	GCATGGTCAC	TCCATAGATG	GAATCAGCCG	CTGCCATGGT	7620
TCCCCTTACGG	TGGGTTACGA	CGATGAACTG	GCTGTCCCTG	TCAAAGCGGT	TGAGGTAATC	7680
CCCAAACGT	TTAACATTGG	CTTCATCCAG	CGCAGCTTCC	ACCTCATCCA	AGATAACAAA	7740
TGGAATAGTC	TTGACACGAA	TAATGGAGAA	GAGCAAGGCA	AGAGCCGATA	GGGCTTTTTTC	7800
ACCACCACTC	ATGAGATTAA	GAGACTGGAT	TTTCTTGCCT	GGTGGTTGGA	CAGAAATTTTC	7860
AACCCCAGCT	GTCAGCAAGT	CTCCTTCAGT	CAAAATGAGG	TCAGCCTGAC	CTCCACCAAA	7920
CATCTGCTTG	AAGGTCACTT	TAAAGGACTC	ACGAATGACC	TCAAAGGTTG	ATTTAAAGCG	7980
TTCCCTTGACC	TCATCATTCA	TCTCTGTAAT	GGTCTCAAGG	AGCAGGTTTT	TCGCAGACAA	8040
AATATCATCA	CGTTGGCTAT	TTAGGAAATC	CAGACGGTTG	TGAACTTCTT	CGTACTGTTC	8100
AATAGCGTCT	AAATTGACAG	GACCCAGTGA	GCGTATAGCC	TTCTCTAAAT	CCTTAACTTC	8160
TTGCTCTGCC	AGATTGAGAT	TTTCCAACTC	ATGCGCCTTT	TCTAAAGCTT	CTGTGTAGCT	8220
GATCTGGTAC	TGGTCTGTTA	ATTGACTTTG	TAGATGGCGC	AAGCGCTCGC	TAACCTTTTC	8280
TTTCTTGGCT	TCAGCACGAG	TTTGCTTGCG	AATCCACTCT	TCATTCTGCT	GGCGAGCCTG	8340
ATCCAAATGA	CTAGCAATAT	CATCCAGTTG	ACCCTCAATA	TCATCCAAC	CAAACTGCTT	8400
GCGAATCAAA	CCTTGTGGA	GATTTGTTTT	TTGAGTTTTC	GATTCTTCCG	CCTGTTGACT	8460
GAGCAATTCT	GTATCAACCT	TCTCAAGATT	ATCAATCTTT	TCTTGAAGAA	GGCGCTGGAT	8520
TTCCCTCTGT	TCAAAATCAA	GATTGTCCAA	TTCCCTTGCT	AAGCGTTCAA	TATCAGCAAC	8580
TTCATAACGT	TTTGGCCCTT	GCAGTTCTGT	CTTAAGCAAA	CGAGCTTGCG	CTAGCTCTTC	8640

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CTGCAAGTTT	TGATAGCGTT	CTTGATGGC	ATTTTGTGA	GACTTAATCT	CTTCAATCTC	8700
AGCTTCCAGA	TTTTGCTTGT	CACTGGAGAT	TGCAGCAAGA	CGCTCTTGGC	AGTTTTCCTT	8760
ATCCGCTTGC	CAATCTCCCT	CGGAAAGACG	ATCTATTTCC	TCTTCTTGGA	GTTTCCAAAG	8820
AGTTTCCAGT	TCTTCAACTT	GCTGACTAGT	TTGCTGATAA	GCGAGGAACA	AGCCTTGCTC	8880
CTGAATACGT	GCCTGCTCTC	CTTGAGATTT	AATAGCTTCT	AATGACTCGG	TCAATCTGGC	8940
CATCTCATCT	TGCAAGGTCT	TCAAAGTCGC	CTCTTCTGAA	CCCAAGCTTG	CTTCTTCTTC	9000
AGCAATTTCT	TTTTGTAATT	GCTCCAGTTC	TGGCTTGATA	AAAATGCTGT	TATTCTGGCG	9060
ATTGGCACCA	CCTGCATAAG	AACCACCTGT	GCGCAACTCT	GTCCCATCCA	ATGTCACCAT	9120
ACGAACCTGA	TAACGAACTT	GGCGAGCTGC	TGCACGCGCA	TGTTCTACGG	TATCAAAGAT	9180
AGCCGTCGTA	GCTAGCAAGT	TCTTGAAAAT	GGCTTCCAGT	CTAGTATCAA	AAGTCACCAA	9240
CTCATCTGCC	ATCCCAAGGA	AACCTGGGCT	TACAGCGATA	GCATCTTGGT	TCTGACTAGA	9300
AATCGTACGC	GCCTTGATAG	TGGTCAAAGG	AAGAAAGGTT	GCACGACCGG	CTCTGTTCGG	9360
TTTAAGGAAG	TCAATAGCCT	TGGTTGCCGA	CTCTTCATCT	TCTACGATGA	TATGCTGGCT	9420
ACTTGCCCCCT	AAGGCAATCT	CTAGGGCAGT	TTGATAATAA	ACATCAAAGG	TCAGATGCTC	9480
ACTGACTGCA	CCAATAATCC	CACCTAGGCG	ATCTTTTCT	TGGAGAACAC	TCTTAACACC	9540
TGCATAAAAG	TTACTATGAT	TTCTCAGGAT	ATTTTCCAAA	CTTTGAGCTC	TGGCCTGCTT	9600
GTTTTTGAGA	TTATCCAGAC	GGTCAAAGAG	TTGGCTTTGT	TGAGCTTGAT	AGGAAGTTTT	9660
CTGCTCCTCT	TGCTCCTTGG	CAATAGCTTG	GTAGTCAGCC	AATAATTCT	GAACCTGCTC	9720
CTTGGCAGTT	TCAAGCTCTT	CCTTTTGCTG	ACTAGCCTTC	TCTTTAGCTA	TAGCTAATTG	9780
CTCTTTCAGC	TTTTCTAGTT	GATCTGCTTG	TTTTTGAGAA	AGCTGACGAC	TATTTTCCAA	9840
CTCATCTCTCA	ATACGGGTCA	ACTGGTTTGA	GACATCCGCT	TCTTCTTGTA	AAAGAGCTAC	9900
AAAGCGTTCA	CGTAAGAGCT	CAATCATCTG	ATCAGGATCG	TCTGAGAAAG	CCAGCAATTC	9960
AGCTTCTAAA	CGATTGAGTT	TTTGATTATT	TTGGACTAGA	TTTCCCTCTA	ACAGAGCTAA	10020
AGAGCTTTCT	TTATCAGACT	TTTCTTTGCT	GAGTGAATTT	CTCTTATCCT	CCAAAGCAGC	10080
CAAACGGGCT	TGTGCCTCCT	GTTGATTCAA	GGCCACTTGC	TCGGACTCCA	GTTTCGATAG	10140
GGCTAATTTT	CTTTCTAAAT	CACTAATCAG	ACTAGTCAAG	TCCATCAAAC	TGCCTTGGTC	10200
TTTGCCATT	TCAGCCTGTA	AATCTTGGCG	TTGCTTTTGA	AGAGTTTGAT	TTTCTTCTTC	10260
TAATTTTTC	CGCTTTTGGT	AATAACTCAT	CAAGAGTTCT	TGAACCTGAG	TCAACTCTTC	10320
TTCTGTCGAC	TCTAGTTCAG	CCTTATTTTC	CTTGATTTGA	GCAACCAGAA	CATCTAAATA	10380
AATAGCCTTA	CGTTGTCCTT	CCAAGTCTAA	AAACTTACGG	GCATTCTCAG	CTTGCTTCTC	10440

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AAGAGGCTTG	ATTTGATTAT	CCAACCTCGTA	GATAATGTCC	TCTAAGCGGT	CCAGATTATC	10500
CTGAGTTTGC	TGCAGTTTAC	TCTCGGTTTC	TTTCTGCGA	GTCTTGATTT	TTAAAACCTCC	10560
AGCAGCTTCT	TCAAAAATAG	CTCGTCGTTC	CTCAGGCTTG	GAATTAAAAA	TCTCCTCAAC	10620
CTTCCCTTGG	GAAATAATAG	AGAAGGAATC	TCGTCCCAAT	CCAGTATCCA	AGAAGAGGTC	10680
ATGAATATCA	CGCAGACGGA	CTTCTTGCC	GTCAATCTTG	TATTCGCTAT	CTCCACTACG	10740
ATAGACATGG	CGTTCCACCC	TGATTTCTTG	ACCTGCATCC	TTGATAAATC	CGTCATGATT	10800
ATCCAGAGTC	ACAACCTACAG	AAGCATAATT	GAGCGGTTTG	CGACTTTCGG	TTCCAGCAAA	10860
GATGATATCC	GGCATCTTGC	CCCCACGGAG	ACTCTTGACA	CTAGACTCCC	CCAAAGCCCA	10920
ACGCAGACTT	TCTGTAATAT	TGGACTTTCC	AGATCCATTG	GGTCCAACAA	CTGCCGTCAC	10980
ACCTTGGTCA	AAAACGACCT	TGGTCTTATC	AGCAAAAGAC	TTGAACCCCT	GAATTTTCGAT	11040
TTCTTTTAAA	TACATGAATC	CAGCCCCCTC	TCAACGGCAT	TTTGTGGCAGC	TTCTTGCTCT	11100
GCTAATTCTT	TAGAACGACC	TTGGCCTTGA	CCGATGCTCT	TACCTTCAAC	AAGAACTTCT	11160
ACATCAAAAA	CCTTATCGTG	AGCAGGCCCT	GTTTCAGAAA	TCACCTGATA	ACGAATAGCC	11220
ACATCACCAT	TGACCTGAAG	CAACTCTTGG	AGATGGGTTT	TATAGTCTGT	AATCATCTCA	11280
AACCTCGCCTG	CTTCAACCTT	AGGAATCATG	ACTTGATAGA	TAAATTCCTT	GACCTTGGCC	11340
ACATCCTTAT	CCAAAAGAAG	GGCACCAAGA	AAGGCTTCAA	AGGCATCACC	AAGAATGGTG	11400
TCACGATTGC	GACCACCTGA	TTTTTCTTCC	CCTTTACCCA	ACTTGATAAA	CTGGTCAAAC	11460
TGGCAATCAC	CGCAAAACC	AGCTAAACTC	TCCTCACGGA	CAATCATAGC	ACGGAGTTT	11520
GATAGGTCAC	CTTCAGGCTT	TTTAGGATAT	TTTTTATATA	GATATTCTGA	AATCAATAAC	11580
TGTAGAACAG	CGTCTCTTAA	AAATTCCAAG	CGTTCATTGT	GTGAAATTTT	TAAGAGGCGG	11640
TGCTCATTTG	CATAACTCGT	ATGAGTAAAG	GCAGTTTCCA	GTAACCTTTT	GTCTGCAAAT	11700
TCGATTGCAA	AATGATTCTT	TAGTACAGTT	TGTAATCTCT	TCATACCAAC	CTCTTTCTAA	11760
CTGATAATAG	TCCTTTTAT	TATATCAAAA	AAAGCCCCTT	GAGTCACTCT	AAAACGGGAC	11820
TGGAAAGCAT	TTGGGAATTC	TTTAGACAGA	GATTCTCAGT	TTTAGCGGCA	AATTTGGGTC	11880
AGGATAAAGA	AAAAAGCCCT	ATTAAAGGCT	TTTLAGGATG	TTTACATCCA	CCCTGAGGGA	11940
ATCGAACCCC	CATCTCAAGA	ACCGGAATCT	TACGTGATAT	CCATTACACT	AAGGGTGGAA	12000
ACTTGTTTTA	TTATAACAGA	AATTTGCTCT	AATAACAAGT	TTTTTGGTCA	AAGACCCCGT	12060
CTTAGTGGGA	AGCATCCCCA	TTCCAGATGG	AGTTTTTCAC	GATCACATAA	TCAACGTGTT	12120
TAAGGTCAGC	AACCTGACGT	CCACCTGCAT	AAGAAATAGC	ACTTTGAAGG	TCTTGTTCCT	12180

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TCTCAGTTAA AGTGTCTTGC AGATGACCTT TAGCAGGAAG CAAGATACGT TTGCCTTCCA	12240
CATTTTGTGTA AGCACCTTTT TGATATTGTG AGGCTGAACC ATAATATTCT TTGAACTGTT	12300
CACCATCGAC TTCAATCGTT TTCCCTGGAC TTTCAATGTG TCCTGCAAAG AGGGAACCAA	12360
TCATGATCAT GCTAGCACCG AAGCGGATAG ACTTAGCAAT ATCACCCTGA GTACGAATTC	12420
CTCCATCAGC GATAATCGGT TTACGCGCAG CCTTGGCACA CCAGCGTAGA GCAGCCAACT	12480
GCCAACCACC TGTACCAAAA CCAGTCTTAA CCTTGGTGAT ACAAACCTTA CCAGGACCGA	12540
TTCCGACCTT AGTAGCATCC GCACCAGCAT TTTCCAATTC ACGCACAGCT TCTGGTGTTC	12600
CCACATTTC AGCAATGACA AAGGTATCTG GCAATTCTTT CTTGATGTGT TGAATCATAG	12660
AAATCACGCT ATCCGCATGA CCATGAGCAA TATCAATAGT GATATACTCA GGAGTATCAG	12720
CCTTGAGCTG GCTAACAAAA TCATACTCAT AATCCTTAAC ACCGACAGAG ATAGAAGCAA	12780
TGAGCCCTTG ATTGTGCATT CGTTTAATAA AAGGAATGCG TCCTGCCTCA TCAAAACGGT	12840
GCATAATGTA GAAGTAACCA CCTTTAGCCA GTTGCTCTGC TACATTTTCA TCCAAAATCG	12900
TCTGCATATT CGTGGCACA ACAGGTAGTT TAAAGGTGTG ATTTCTTAAA GTGACACTTG	12960
TATCCGCTTC TGCACGGCTT TTAATGACAC ATTTATTTGG AATCAATTGA ATATCTTCGT	13020
AATCAAAAAT TGGAAATTCA TTTAACATAT CGATGTCTCG TTTCTTTTGT AATGACCTAC	13080
CTATGCTCTT GCATCACTAC GCCTTTTCCG ACGTTTCCTG G	13121

(2) INFORMATION FOR SEQ ID NO: 127:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 9578 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 127:

CCGAATGCAA TGTTTACGGT TGAACCTGAA AATGGACATC AGATTTTAGC AACAGTTTCT	60
GGTAAAATTC GTAAAACTA TATTCGTATT TTAGCGGGAG ATCGTGTTAC TGTCGAAATG	120
AGTCCATATG ACTTGACACG TGGACGTATC ACTTACCGCT TTAAATAATC GAAAAACTTG	180
GAGGGATAAG AAATGAAAGT AAGACCATCG GTCAAACCAA TTTGCGAATA CTGTAAAGTT	240
ATTCGTCGTA ATGGTCGTGT TATGGTAATT TGCCCAGCAA ATCCAAAACA CAAACAACGT	300
CAAGGATAAG ATAGAAAGGA GAAAACATGG CTCGTATTGC TGGAGTTGAT ATTCCAAATG	360
ACAAACCGGT AGTAATCTCA TTGACTTATG TTTATGGTAT CGGACTTGCA ACATCTAAGA	420
AAATTTTGGC TGCTGCTGGA ATCTCAGAAG ATGTTCTGTG ACGTGATCTT ACATCAGATC	480

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AAGAAGATGC TATCCGTCGT GAAGTGGATG CAATCAAAGT TGAAGGTGAC CTTCGTCGTG	540
AAGTAAACTT GAACATCAAA CGTTTGATGG AAATCGGTTC ATACCGTGGT ATCCGTCACC	600
GTCGTGGACT TCCTGTCCGT GGACAAAACA CTA AAAACAA CGCCCGCACT CGTAAAGGTA	660
AAGCTGTTGC GATTGCTGGT AAGAAAAAAT AATATAGGAG GTAAAAGTCT TGGCTAAACC	720
AACACGTAAA CGTCGTGTGA AAAAGAATAT CGAATCTGGT ATTGCTCATA TTCACGCTAC	780
ATTTAATAAC ACTATTGTTA TGATTACTGA TGTGCATGGT AATGCAATTG CTTGGTCATC	840
AGCTGGTGCT CTTGGTTTCA AAGTTCTCG TAAATCTACA CCATTGCTG CTCAAATGGC	900
TTCTGAAGCT GCTGCTAAAT CTGCACAAGA ACACGGTCTT AAATCAGTTG AAGTTACTGT	960
AAAAGGTCCA GGTTCCTGGTC GTGAGTCAGC TATTCGTGCG CTTGCTGCCG CTGGTCTTGA	1020
AGTAACAGCA ATTCGTGATG TGA CTCCAGT GCCACACAAT GGTGCTCGTC CTCCAAAACG	1080
TCGCCGTGTA TAATCATCGC ATTACACTGC TTTTCGTTTA AGAGGGAGTA ACTAAATGAT	1140
CGAGTTTGAA AAACCAAATA TAACAAAAAT TGATGAAAAT AAAGATTATG GCAAGTTTGT	1200
AATCGAACCA CTTGAACGTG GCTACGGTAC AACTCTTGGT AACTCTCTTC GTCGTGTACT	1260
TCTAGCTTCT CTACCAGGAG CAGCTGTGAC ATCTATCAAC ATTGATGGTG TGTACATGA	1320
GTTTGACACA GTTCCAGGTG TTCGTGAAGA CGTGATGCAA ATCATTCTGA ACATTAAAGG	1380
AATTGCAGTG AAATCGTACG TTGAAGACGA AAAAATCATC GAACTGGATG TTGAAGGTCC	1440
TGCTGAAGTA ACAGCTGGTG ACATTTTGAC AGATAGCGAT ATTGAAATG TAAATCCAGA	1500
TCATTATCTC TTTACAATCG GTGAAGGTTT TTTCTAAAA GCGACTATGA CTGTAAACAG	1560
TGGTCGTGGA TATGTACCTG CTGATGAAAA TAAAAAGGAT AATGCACCAG TTGGAACACT	1620
TGCTGTAGAT TCTATTTATA CACCAGTTAC AAAAGTCAAC TATCAAGTGG AACCTGCTCG	1680
TGTAGGTAGC AATGATGGTT TCGACAAATT AACCCTTGAA ATCTTGACAA ATGGAACAAT	1740
TATTCCAGAA GATGCTTTAG GGCTTTCAGC ACGTATTTTG ACAGAACATC TTGATTTGTT	1800
TACAAATCTT ACTGAGATTG CTAAGTCAAC TGAAGTGATG AAAGAAGCTG ATACTGAATC	1860
TGACGACCGT ATTTTAGATC GTACGATTGA GGAAGTGGAC TTGTCTGTGC GTTCATACAA	1920
CTGTTTAAAA CGTGCCGGTA TCAATACTGT GCATGATTTG ACAGAAAAAT CTGAAGCAGA	1980
GATGATGAAA GTACGAAATC TTGGACGCAA GAGTTTGGAA GAAGTGAAAC TCAAACATC	2040
TGATTTGGGT CTTGGATTAA AAGATAAATA AAGGAGGAAT ACATGGCTTA CCGTAAACTA	2100
GGACGCACTA GCTCACAACG TAAAGCAATG CTTGCGGATT TGACAACTGA CCTTTTGATC	2160
AACGAATCAA TCGTGACAAC TGAAGCTCGT GCTAAAGAAA TCCGTAAAC TGTGAAAAA	2220

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ATGATTACTC TAGGTAAACG TGGTGATTTG CATGCACGTC GTCAAGCAGC TGCTTTCGTA	2280
CGTAATGAAA TCGCATCTGA AAACATGAT GAAGCAACTG ATAAGTACAC TTCTACTACA	2340
GCACTTCAAA AATTGTTCTC AGAAATCGCA CCTCGTTATG CTGAACGTAA CGGTGGATAC	2400
ACTCGTATCC TTAACACTGA ATCACGTCGT GGTGATGCAG CGCCAATGGC GATCATCGAA	2460
TTAGTATAAA ATCATCAATT TTGTGAGTG TTATGATGAT GGAGTCTTGT GCTCTTAGTC	2520
TAGCTCTGGT CTACCGCTAG GATTTCGGTC CTAGCGGAA CACTCATCAT AAGTTGGGAT	2580
AGTAGACGCT TGTTTACGAA ATTGTTTTTT TCTTAAGAAC AACTTCGTAA GCAGGCGTTT	2640
TTGAGTATTT TCGTTAGAA TATGCTATAC TATTTGAAAA GAATCCTGTT TAATGTTAAG	2700
GTTTCTTATT TTAAGAAGAA TTGGAGTTTA CTTATGAAAG CCATTATAAC TGTTGTTGGT	2760
AAAGATAAAT CTGGAATTGT TGCAGGTGTT TCTGGTAAAA TTGCAGAATT AGGATTGAAT	2820
ATTGACGATA TCTCTCAAAC TGTCTTGGAT GAATATTTTA CGATGATGGC TGTTGTATCT	2880
AGTGATGAAA AGCAAGATTT TACCTATCTT CGTAATGAAT TTGAAGCTTT TGGGCAAACT	2940
TTGAATGTAA AAATCAATAT TCAGAGTGCA GCGATTTTCG AAGCTATGTA TAATATCTAG	3000
GAGGTCATCA TGGATATTAG ACAAGTTACT GAAACCATCG CCATGATTGA GGAGCAAAAC	3060
TTGATATTA GAACCATTAC CATGGGGATT TCTCTTTTGG ACTGTATCGA TCCAGATATC	3120
AATCGTGCTG CGGAGAAAA CTATCAAAAA ATTACGACAA AGGCGGCTAA TTTAGTAGCT	3180
GTTGGTGATG AAATTGCGGC TGAGTTGGGA ATTCCTATCG TTAATAAGCG TGTATCGGTG	3240
ACACCTATTT CTCTGATTGG GGCAGCGACA GATGCGACGG ACTACGTGGT TCTGGCAAAA	3300
GCGCTTGATA AGGCTGCGAA AGAGATTGGT GTGGACTTTA TTGGTGTTT TTCTGCCTTA	3360
GTACAAAAAG GTTATCAAAA GGGAGATGAG ATTCTCATCA ATTCATTCC TCGCGCTTTG	3420
GCTGAGACGG ATAAGGTCTG CTCGTCAGTC AATATCGGCT CAACCAAGTC TGGTATTAAT	3480
ATGACGGCTG TGGCAGATAT GGGACGAATT ATCAAGGAAA CAGCAAATCT TTCAGATATG	3540
GGAGTGCCCA AGTTGGTTGT ATTCGCTAAT GCTGTTGAGG ACAATCCATT TATGGCGGGT	3600
GCCTTTCATG GTGTTGGGGA AGCAGATGTT ATCATCAATG TCGGAGTTTC TGGTCCTGGT	3660
GTGTGTAAAC GTGCTTTGGA AAAAGTTCGT GGACAGAGCT TTGATGTAGT AGCCGAAACA	3720
GTTAAGAAAA CTGCCTTTAA AATCACTCGT ATCGGTCAAT TGGTTGGTCA AATGGCCAGT	3780
GAGAGACTGG GTGTGGAGTT TGGTATTGTG GACTTGAGTT TGGCACCAAC CCTGCGGTT	3840
GGAGACTCTG TGGCACGTGT CTTGAGGAA ATGGGGCTAG AAACAGTTGG CACGCATGGA	3900
ACGACGGCTG CCTTGGCCCT CTTGAACGAC CAAGTTAAAA AGGGTGGAGT GATGGCCTGC	3960
AACCAAGTCG GTGGTTTATC TGGTGCCTTT ATCCCTGTTT CTGAGGATGA AGGAATGATT	4020

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GCTGCAGTGC	AAAATGGCTC	TCTTAATTTA	GAAAACTAG	AAGCTATGAC	GGCTATCTGT	4080
TCTGTTGGAT	TGGATATGAT	TGCCATCCCA	GAAGATACGC	CTGCTGAAAC	TATTGCGGCT	4140
ATGATTGCGG	ATGAAGCAGC	AATCGGTGTT	ATCAACATGA	AAACAACAGC	TGTTTCGTATC	4200
ATTCCCAAAG	GAAAAGAAGG	CGATATGATT	GAGTTTGGTG	GTCTATTAGG	AACTGCACCC	4260
GTTATGAAGG	TTAATGGGGC	TTCGTCTGTC	GACTTCATCT	CTCGCGGTGG	ACAAATCCCA	4320
GCACCAATTC	ATAGTTTAA	AAATTAAGAA	AATAGGAGAA	ATTTTAAGTT	CTATTTAAGA	4380
TTAGACGTGT	ATACTATAAT	CATTAAATA	AGACCTCCTA	ATATTATTTG	AAACAGATAA	4440
CACTGAATTA	GTTTGAATTT	GATTTTCATC	TAATATCTTT	ATTTAATGAA	CTCCTAAACT	4500
TTTTCATAAT	AATCTCCTTC	AAAAGTCGCC	TGTATGGGTG	GCTTTTATTT	TATCATTCAT	4560
GATATAATAG	AAGCAAACGG	AGGACGGAAA	ATGGTAAAAG	TACGATTGTA	TTTGGTACGT	4620
CATGGCAAGA	CCATGTTTAA	CACGATTGGT	CGCGCGCAAG	GTGGAGCGA	TACTCCCTTA	4680
ACTGCTGAAG	GTGAACGAGG	GATTCAAGAG	TTAGGAATCG	GTTTGCGAGA	ATCTGATCTA	4740
CAGTTTGAGC	GTGCTTATTC	GAGTGATTCT	GGTCGTACCA	TTCAGACCAT	GGGAATTATC	4800
CTTGAAGAAC	TTGGCTTGCA	GGGGGAAATC	CCTTATCGCA	TGGACAAGCG	TATCAGAGAA	4860
TGGTGTTTCG	GTAGTTTGA	TGGAGCCTAT	GATGGCGATC	TTTTTCATGGG	CATTATTCCT	4920
CGTATCTTTA	ATGTGGACCA	CGTTCACCAA	TTGTCTTATG	CTGAACTGGC	TGAGGGCTTG	4980
GTAGAGGTGC	ATACAGCTGG	TTGGGCTGAA	GGCTGGGAAA	AACTCAGTGG	CCGAATCAAG	5040
GAAGGCTTTG	AAATGATTGC	AAAAGAAATG	GAAGATCAAG	GTGGAGGTAA	CGCCCTTGTT	5100
GTCAGCCATG	GAATGACTAT	TGGAACCATT	GTTTATCTGA	TTAATGGCAT	GCATCCGCAT	5160
GGTCTGGATA	ATGGTAGCGT	GACAATCCTT	GAATATGAGG	ACGGCCAGTT	TAGGGTTGAA	5220
GTTGTCGGTG	ACCGTAGTTA	CCGAGAGCTA	GGACGTGAGA	AGATGGAAGA	AGGCTCTATT	5280
TAATCAGTCT	AGACTTGCTT	GCCATGAGCT	AGGGATTGTA	TAAGAATATC	AAGATAAGAA	5340
AAAACAGCCG	AGGGCACTCC	TTTCGGCTGT	TTTTGATGTG	GAAAACTAAA	GTGTAATGCT	5400
ATTGCTTTTA	GAGATTTTCA	TAAACAAGAG	CAAGGAACCT	ACTGTTAGAA	CAGTCAGGAT	5460
AGTTGACAAG	GTTGCGGCTA	CACCGTAATT	TCCTCTGAGA	ACCTCTGTAT	AAATAGCTAC	5520
AGTCATTGTT	CTTGTTTTGA	CATTGTAGAG	GAGGATAGAA	GTAGAGAGTT	TTGAAATCAT	5580
TGTGACTCAA	GATAAGATGG	CTCCAGAAAT	GATACCAGAT	AGCATCATTG	GAGTTGTAAT	5640
CTTAGCAAAG	GTATTGAGAC	GACTACTTCC	TAAGCTTTCA	GCAGCTTCTT	CAATACTTGG	5700
TGCTATTTGT	TGTAAGCTAG	CAACAGATGA	GCGAATAGTA	TAAGGTAATC	TTCTGGCAGA	5760

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TAGAGACATA	ATCAAGATGA	AAGCAGTCCC	TGTAATCATA	AGAAATCCAC	TTCCAAATAG	5820
ACCAGTATTG	AAGGAAGAAA	TGAAGGCAAT	CCCTAGAACG	GTCCTGGTA	CAATATAAGG	5880
TACCATACTG	AGGCTGTCAA	TTAAGTTTGT	AAACAAATTC	CGTTTTCTAA	CGGCTAGGTA	5940
GGAGATAAAT	GTCGCAAATA	GAACAAC TAG	AACTAAGGCA	ATCAAAGGGA	TACGAATGGT	6000
ATTGAAAATA	GCAGATCCCA	TACGATGGAA	AGCTACCTTG	TAACTGTTTG	GAGAATAACC	6060
TTTAACAGAT	ACCATACCTG	ATGTTTTTAG	GAAAGAGGTA	TAAATTAAGT	AGATTTGAGG	6120
TAAAACAGAG	ATAAAGATAA	TTCCGTAGAC	TGTTGCATAA	ATGGCAGCCA	TTTTTCCTTT	6180
TGTAGTTTTT	TTAGGCTCAA	TTGGATGGAG	CAGATTCATG	CTGAAACTGT	AGCGGTTTGC	6240
AATGTGTTTT	TGGATAAGGA	AAATTGCCAA	GGCAATGATA	ATCGCCATAA	TTGCAAAAGC	6300
AGAATTTCCCT	CCAACCTCGC	TAATAAATTG	GGTATAAATC	AGGACAGGGA	AAGTCCGATA	6360
CCCTTCGCCA	ATCAACATAG	GCGTTCCAAA	GTCTGAGAAT	GCTCTCATAA	ATACAAGCAA	6420
GGAGCTGCTA	GTAAGGTTGG	AACTAGGAGA	GGTAAAACAA	CCGTTACGAT	AGGTTTAAAT	6480
CCGAAGGACC	CCATGCTTTC	AGCTGCTTCA	AGTAGAGAAT	TGTCAATACT	GTTCATTGTT	6540
CCAGCAACAT	ATAGAAATAC	CAGTGGGAAT	AGTTGCAGTG	TAAAGACAAG	TACAATTCCCT	6600
TTGAATCAAT	AAATATCGAT	AGCTGGAAGA	TAAAGGGCAT	TTGTCAAAAA	TTTAGTGATG	6660
ACCTCATTTT	GTCCTAGCAA	GAGAACCCAG	GAGTAGGCTC	CTACGAAAGG	AGCTGACATG	6720
GAAGCAATGA	TAATCAATAT	TTGTAGAAAT	TTCTTCCCCT	TGAAGTCATA	CATAGAGAAG	6780
AGATAAGCTA	ATAGGGTTCC	TACAAC TAAG	GAAGTGATAG	TAGCGGTAAT	GGAAACCTTG	6840
AAACTGTTGA	CTAGTGTCTC	AGAGTAGTAG	GCTTTACTAA	AGAAAGTGAC	AAAATTAGCT	6900
AGTGAGAATT	GTCCTTCATG	TATAAGTGCT	TGCTTGAGCA	CGGTAACGAT	AGGATAAACG	6960
AGAAAGATAG	GATAGGTAAG	AAAGAGGAAG	AAAGAGGAAA	CTGTCCAAAT	ATTTAGTTTT	7020
TTACGTTCCT	TGGTTGACTC	CTTTTATCAG	GTTTTGGGAA	CCATCTGCAG	AAAAGATGTT	7080
TAATTTTTCG	GTATTGATTG	G TAGACGAAT	ACGATTGCCT	TTTTGTAGAT	CTTCTTCAAA	7140
AGTTGATTCT	TCAC TAACTT	GAATTTT TGA	GGCAAAACCT	GTCTCAATGA	AATAATCCGT	7200
ATTTAGTCCA	AGATAGACGC	TATCTCTAAT	AGTTCCTTCA	ATATCTCCAG	ATTCACTTTT	7260
GATAAACTCT	TCGGGACGAA	TGCTTACATG	AATAGCTTGC	TCCTCAACCT	GATCAAGAGC	7320
TGGCATTCGA	AGGGCATAGC	CATCTGAAAA	GACGATATAA	GCGCCGTCGC	TCCGTTTTTC	7380
AAGATTGGCA	GGGATAATAT	TTGTGCGTCC	GATAAAGGTT	GCCACAAACT	CATTAGCTGG	7440
TTTATGATAG	AGTTCTTTTG	GTCGGCCGAT	TTGTTGGATC	ACCCCATCTT	TCATAACAGC	7500
AATTTGGTCT	GAAATAGCCA	TGGCTTCTTC	TTGGTCGTGG	GTTACATAAA	CAGTTGTAAT	7560



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TCCCACTTCG	TGTTGGATTT	CTCGGATGGC	TTGACGCATA	TCCAAGCGAA	GTTTGGCCTC	7620
CAGATTACTA	AGTGGCTCGT	CCATGAGGAG	AACACTTGGA	TTAACCGCTA	AGGCGCATGC	7680
CAAGGTGACA	CGTTGTTGTT	GTCCACCACT	GAGTTTATCG	GGCTTTCGAT	CCGCATATTG	7740
AGCAATTTGC	ATGAGTTCAA	GATACTTGTT	GGTCTGTTGA	ATCAATTCTT	CTTTTGGAAC	7800
CTTCTTTTGC	ATAAGACCAA	AAGCAACGTT	GTCTCGGACA	GTCAAATGTG	GGAAAATAGC	7860
GTAGTTTGG	AAAACCATCC	CGATATTGCG	TTTGCTGGGT	TCCATATTAT	TGATTTTGT	7920
ATCATCGAAG	TAAAATTCTC	CACCTTCGAT	ACTGTTGAAA	CCTGCAATCA	TACGAAGAAG	7980
GGTCGTTTTC	CCACATCCTG	AAGCTCCAAG	AAGGGTAAAG	AGACTTCCTT	TTGGAATTGT	8040
AATGTTCAAA	TTCTCAATAA	CAGGGACATC	GTGGTAGATT	TTTTTGGCGT	TAATAATTTT	8100
GATCTCACTC	ATAGTGAACC	TCTTTTACTG	TTTAGATTGG	ATATCTGTAA	AGACTTCGTT	8160
GTATTTCTTA	ACGATATCTG	ATTTATTCTT	GATGACATAA	TCATAATCTT	CAGTGAGTGT	8220
TTTGATTTTG	TCAATTGGTT	TCATGTTTTC	GCTTGTTTTA	GCATTTTAC	GAACAGGACG	8280
GTTAGTAGTG	GTTGTACCAA	GTGTATCTTG	TACTTCTTGA	GAGATAATAA	AATCGATAAA	8340
TTTCTTGGA	TTTTCCATAT	TTTTAGATTT	TTTAACGATA	GCAGCACTAG	CAGGTAGGAA	8400
GACGGTTCCT	TCTTTTGGAT	AGACTACCTT	AATGTTAGCT	CCGTCATTTA	AGAGTTTAAC	8460
TGCTGGATCT	TCATAAGAGA	GACCAACAGC	CATTTCTCCA	TCAGCGACTA	CTTTATAGAC	8520
ACTAGATGAA	CTTGAACCGA	TTTTACCATC	AATAAGTGTG	AAAAGATCTT	TTACATAAGA	8580
CCAAGCCTTA	TCATCTTTGT	AACCACCTTG	AGCTTGTAGC	ATATTTGTTA	ATTGAGCAAA	8640
GGCGCTAGAA	GAGTTTGCTG	GGTCAGCAGT	TGCGATTTTT	CCTTTTAGTT	CAGGTTTGAA	8700
AAGATCGTTA	TATCCTTCGA	TGTTCATGCC	TTTAGTTAAA	TCAGGGTTGA	CGATTAATAAC	8760
ACTACCATCT	AGTGTATAAG	GAGTAGAGTA	GCCAGTTGTG	TTTTGATATT	CTTTGATAAC	8820
ATTATCATTT	TCTTTTGAAG	TATAGTTTTC	AAAGAGTTCT	CCGTGGGTAG	TATATTGTGT	8880
ATAAGAACCA	CCAAAGATAA	CATCAGCTAC	AGGAACTTCT	TTTTCTGACT	CTAGTTTTTTT	8940
GAAAAGTTCT	CCAGTACCAG	CTTGAATCAG	TTCTACTTTG	ATACCATATT	TTTCTTCAAA	9000
GGCAGGAATA	GTTGCTCCAA	TTAAGCCCTC	TGAGTTTGGT	GAATAAACGA	CTAGCGAACC	9060
GCCGTCCTCT	TTATCAGATG	AACTGTCATC	GGCAGATTCA	TTAGAAGAAC	AAGCAGCATA	9120
ATACATCCAT	TTCTTTTCA	TGATGGATAC	CTCCGTGTG	TTATTTAAGT	TTATTTTAAA	9180
ACAATGTAAG	CGTTTTTAAA	ACATACAATT	CTATTCTATA	GTGTATTGAA	TCTATAACAG	9240
TACACTTTGA	CTGCTAAAAT	ATTTCTATAA	ATTAATTGTA	CTTTCCTGAT	AGAGATGTTC	9300

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ACATCTTATT TCAATTCACT ATATTAGAGT AAAATTCTCT ACAAAAAGAA GAATAGCCTA	9360
TTTTACTATT CTCTGAGTG ATTTCAATTC CTTTGGGGAA ATATGGAGAT ACTTTTTTAA	9420
TCCTGACAAA TGGTTGTTTC TTTTCTAAA TCGGTGATAC TGTATCGGAG AATGCGCGTG	9480
AGGTCACAAA GGCTGCGATA GAGCTTCTAT GGAGAATTTC TTTTGGAGA GATTTTTTAA	9540
AGGAATGAGA CATCCGCTAC CTCCTGGAA GGTTTTTG	9578

(2) INFORMATION FOR SEQ ID NO: 128:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 13440 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 128:

CGGGCTGTTG TGACGATTCT TATTTCTATC TGTGTTATCT TTTTGGGAAC TATTTTGGGT	60
GTTGTCTTGG CTTTTGGGCA ACGTTCAAAG TTAAACCGC TTGTTTGTT GGCCAACTTG	120
TACGTTTGA TTTTCCGTGG GACACCGATG ATGGTTCAA TTATGATTGC CTTTGCTCTT	180
ATGCATATCA ATGCTCCGAC TATTCAGATT GGAATTTTAG GTGTTGATTT TTCGCGCTCG	240
ATTCCAGGGA TTTTGATTAT CTCTATGAAT AGTGGTGCTT ATGTTTCGGA GACTGTTTCGT	300
GCCGGAATCA ATGCGGTTCC AAAAGGTCAG CTAGAAGCGG CTTATTCGCT AGGGATTCGT	360
CCTAAAAATG CGATGCGTTA TGTGATTTTG CCACAAGCAG TCAAAAATAT CTTGCCAGCA	420
TTGGGGAACG AATTTATCAC CATTATCAAG GACAGCTCCC TCTTATCAGC TATTGGGGTC	480
ATGGAGTTGT GGAATGGGGC TACAACAGTT TCTACAACAA CCTATCTACC TTAAACACCA	540
CTTTTATTTG CAGCATTTTA CTACTTGATT ATGACCTCTA TTCTGACAGT AGCCTTGAAA	600
GCTTTTGAAA AACATATGGG ACAAGGAGAT AAGAAATAAT GACAGAAACC TTGATAAAAA	660
TTGAAAATTT ACATAAATCC TTTGGAAAGA ATGAAGTATT GAAGGGCATC AACCTCGAGA	720
TTAAAAGAGG AGAAGTTGTC GTTATCATCG GTCCTTCAGG GAGCGGGAAA TCTACCTTGC	780
TTCGCTCTAT GAATTTGTTG GAAGAAGCAA CCAAGGGGAA GGTTATCTTT GAGGGAGTCG	840
ATATTACGGA CAAGAAGAAT GACCTGTTTG CCATGCGTGA GAAGATGGGC ATGGTTTTTC	900
AACAATTCAA TCTCTTCCT AATATGACTG TGATGGAAAA TATCACCTTG TCCCCATCA	960
AGACCAAAGG TGACAGTAAG GCCGTGTCAG AGAAAAGAGC TCAGGAACCT TTGGAAAAAG	1020
TTGGTTTGCC AGATAAGGCA GACGCTTATC CACAGAGTTT GTCAGGTGGC CAGCAACAGC	1080
GGATTGCCAT CGCGCGTGGG TTGGCTATGG AACCAGATGT TTTGCTCTTT GACGAGCCAA	1140

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CTTCAGCCCT	AGATCCTGAG	ATGGTTGGAG	AAGTTCCTGGC	TGTTATGCAA	GATCTAGCCA	1200
AGTCAGGAAT	GACCATGGTT	ATCGTAACAC	ATGAGATGGG	ATTTGCCCCG	GAGGTGGCAG	1260
ATCGTGTCAT	CTTTATGGCA	GACGGTGTGG	TTGTTGAAGA	CGGAACACCT	GAGCAGATTT	1320
TTGAACAAAC	CCAAGGACAA	AGGACTAAAG	ACTTCTTGAG	TAAGGTTTTA	TAAGTTAGCT	1380
TTGTTTAGCT	ATTTGTAGCC	AGCTTTAAAC	GTAAAGAGA	AGATTAGTGA	AAAGCTCAAC	1440
CAGAGCTTTT	TCTTATAGTT	TAAAGCTATA	GGATTGCCTA	GGAAAGAAGT	GTTAGAGCTA	1500
CATTGTATTT	TTTGGTATAA	TTAAAGATAT	TTGTAAGAAA	AGAGAAGTGA	TATGACACAG	1560
ATTATTGATG	GGAAAGCTTT	AGCGGCCAAA	TTGCAGGGGC	AGTTGGCTGA	AAAGACTGCA	1620
AAATTAAAGG	AAGAAACAGG	TCTAGTGCCT	GGTTTGGTAG	TGATTTTGGT	TGGGGACAAAT	1680
CCAGCCAGCC	AAGTCTACGT	TCGCAACAAG	GAGAGGTCAG	CCCTTGCGGC	TGGTTTCCGT	1740
AGCGAAGTAG	TACGGGTTCC	AGAGACCATT	ACTCAAGAGG	AATTGTTAGA	CCTGATTGCT	1800
AAATACAATC	AGGATCCAGC	TTGGCATGGG	ATTTTGGTTC	AGTTGCCATT	ACCAAAACAC	1860
ATTGATGAAG	AGCGGTCTCT	ATTGGCTATT	GACCCAGAAA	AGGATGTGGA	TGGTTTCCAT	1920
CCTCTAAACA	TGGGGCGTCT	TTGGTCTGGT	CATCCAGTCA	TGATTCCTTC	GACACCGGCA	1980
GGAATTATGG	AAATGTCCA	TGAATATGGG	ATTGACTTGG	AAGGTAAAAA	TGCAGTCGTC	2040
ATCGGTCGAT	CCAATATTGT	CGGAAAACCT	ATGGCCAGC	TTCTTTTGGC	AAAGAATGCA	2100
ACAGTAACCT	TGACTCACTC	ACGTACTCAT	AATCTTTCCA	AGGTGGCTGC	AAAAGCAGAT	2160
ATTCTGGTTG	TTGCAATCGG	TCGTGCCAAG	TTTGTGACTG	CTGACTTTGT	CAAACCAGGT	2220
GCGGTAGTCA	TTGACGTTGG	GATGAACCGC	GATGAAAATG	GTAAGCTCTG	TGGGGATGTT	2280
GATTATGAGG	CGGTTGCCCC	ACTTGCTAGC	CACATTACGC	CAGTCCCTGG	AGGTGTCGGT	2340
CCTATGACCA	TTACTATGCT	GATGGAGCAA	ACCTATCAGG	CAGCACTTAG	GACATTGGAT	2400
AGAAAATAAG	ATAAAAATTT	TCTGAGGAAA	GTGTATTTTC	TATAGCTATA	TCTAAAATGA	2460
TAGAAATGAA	TATTAAATTT	TAGAAATAAG	TTTATAAAAAG	GAGGTTTGCG	CCTCCTTTTT	2520
GTTGTATAAT	GGAGTGAGGT	GATTAGATGA	TTTTAAAAAT	TTATAATGGG	GAATATAGTT	2580
TACAAATGGA	TGGAATATAC	TACTTAGCAC	TAATTGATTA	TCCAAATATT	CAAGAGTGGG	2640
AATTAGAAAA	AATTGCTAAA	TTTATAGCTT	ACGAAAAACT	TCATAAACGT	CAAACAAGTA	2700
TTGAGTGTGC	TGATTCTTGT	TTAAAAAAG	AAATTTTAGA	TTACATCTGT	CAGCATCCCT	2760
TTCTGCCACC	ATTTACTCCT	ACAGATAAAA	GAGTAGCCTC	GACTTATGAC	CTACATAAGA	2820
GGTTAGTGAC	TTCAGACTAC	TGTAGTCATA	CTACGACTAT	AGATGCAGCG	ATTTCTATTT	2880

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TTAAAACTGG	TCGTCTTTTA	TCTGCTGTGA	AAGCCTTTGG	GCGAGATGCT	GAGGAGTTGG	2940
TTTTGGATAG	TCGAAATGCT	GCATCTGATC	CGATAGATTA	TTTTGACTAT	GTCATGTTAG	3000
GGTGGTCAAA	TACAAGTTCT	GGTTATCGAT	TGGCGATGGA	GCGTTTATTA	GGTCGAGCTC	3060
CTTCAGAGAA	AGAATTACAA	GACAAGTTTA	TTCTTGAGT	AAGTTTTCAT	TTTATCTATA	3120
CAGATTGAT	TAAAGTTCCT	GGTTATATTT	TTGATGGTTA	CCATGCTGTA	AAAATTAAGG	3180
ACATGCTTAA	TTTATTAAGT	GAGTGTATA	TTTGCATTAT	TCCAACATCAT	AATAAGAGCC	3240
AATTTGAAAA	TATTATTCCA	ACCAAATAC	AAGATAGGGT	GTATTATCTT	GACTATGCTG	3300
GAGAAGACTT	AGAAGAGTGG	ACTAAGAAAG	TCTATCAAGT	TGTTTTAAAA	CAATCAGATA	3360
AAGGATAGTT	GAGGAAAAAA	CGATGAAAGT	GATTGATCAA	ACCTTACTAG	AAAAAGTCAT	3420
TATTGAACGT	TCTTGACAA	GTCATAAAGG	AGACTACGGT	CGTCTGCTGT	TGCTTGGTGG	3480
GACTTATCCT	TATGGTGGTG	CCATCATCAT	GGCTGCTTTA	GCAGCTGTAA	AAAGCGGTGC	3540
AGGATTGGTA	ACCGTTGGAA	CGGACAGGGA	AAATATCCCT	GCTCTACACA	GCCATTTGCC	3600
TGAGGCTATG	GCCTTTTCTC	TGCAAGATCA	GTAATTGTTA	CAAGAGCAAT	TGGAGAAGGC	3660
AGAAGTTGTC	TTGCTGGGGC	CTGGTTTACG	AGACGATACG	TTTGAGAGAA	ATCTTGTAAG	3720
ACAGGTCTTT	GCTAGCTTAA	AAAAGAATCA	GATTTTGATT	GTAGATGGAG	GGGCCTTAAC	3780
CATCCTTGCT	AGGACAAGTT	TGTTGTTTCC	ATCTAACCAG	CTTATCTTAA	CTCCCCACCA	3840
AAAAGAATGG	GAAAAACTGT	CTGGTATTGC	TATTGAAAAG	CAAAACGAAG	GTACAACATC	3900
TAGTGCCCTG	ACTTCTTTCC	CTCAAGGAAC	AATTTTGTTA	GAGAAAGGTC	CAGCTACTCG	3960
TATTTGGCAA	GTTGGCCAGT	CTGATTATTA	CCAGTTAAAG	GTTGGCGGTC	CCTATCAGGC	4020
GACTGGTGGT	ATGGGTGATA	CACTGGCTGG	AATGATTGCA	GGATTGTCAG	GCCAATTTCC	4080
ACAGGCCAGT	CTCTACGAAC	GTGTGGCAGT	AGCAACCCAT	CTTCATTTCAG	CCATAGCCCA	4140
AGAACTATCT	CAAGAAAATT	ATGTGGTCTT	GCCGACGGAA	ATTAGTAATT	GTCTTCCTAA	4200
AGTAATGAAA	AGATATGTCT	AAAATAGTTA	GACAAAAAAT	GTTGATAATT	TGTATCATTA	4260
TTCTTAATTC	ACAAAAACG	AACGTTTAGT	ATTCTTCTTG	CTAAGAAACT	AAATTTGTTC	4320
GTTTTTTTAC	TCTTGTAAT	CTATTTTGT	TAGAGTTGAT	TTGGTTTACA	TCCGTACTTA	4380
AATTGATTG	TTAGAGCTCT	ACTTTTATTA	AAAAAATTCA	ATTTCAAGGA	TAAATAAGCA	4440
GTATTCTAAA	GGTACTTTTA	GATGAAATAA	AAGCCTTTAC	ATGGTATAAT	AGAGGTAGCT	4500
CTTTAATGGA	GGTGTGAG	TGGAAAATCT	GAAGAAAATG	GCAGGTATCA	CGGCTGCTGA	4560
ATTTATCAAG	GATGGGATGG	TTGTAGGGCT	AGGAACAGGT	TCTACTGCCT	ATTATTTTGT	4620
CGAAGAAATC	GGTCGTCGAA	TCAAGGAAGA	AGGCTGTCAG	ATTACAGCTG	TGACGACTTC	4680

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TAGTGTGACC	AGTAAACAGG	CTGAAGGGCT	CAATATCCCG	CTCAAGTCTA	TTGACCAAGT	4740
AGACTTTGTC	GATGTGACAG	TCGACGGGGC	GGATGAAGTG	GATAGTCAGT	TTAATGGAAT	4800
CAAAGGCGGT	GGTGGTGCCC	TTCTCATGGA	AAAGGTGGTC	GCAACACCAT	CAAAAGAATA	4860
CATTTGGGTG	GTGGATGAAA	GCAAGCTGGT	CGAAAACTA	GGTGCTTTTA	AATTGCCAGT	4920
AGAAGTGGTT	CAGTATGGTG	CAGAGCAGGT	CTTTCGTCAT	TTTGAACGAG	CTGGCTACAA	4980
ACCAAGTTTC	CGTGAAAAAG	ACGGCCAACG	TTTTGTGACC	GATATGCAGA	ATTTTATCAT	5040
TGACCTCGCC	TTGGATGTCA	TTGAAAAATC	AATTGCCTTT	GGACAAGAAT	TGGACCATGT	5100
CGTTGGTGTT	GTGGAGCATG	GTTTATTCAA	CCAAATGGTG	GATAAGGTAA	TCGTTGCTGG	5160
ACGAGATGGA	G TTCAGATTT	CAACTTCAAA	AAAAGGAAAA	TAGAAGGGGG	CATAAGATGT	5220
CTAAATT TAA	TCGTATTCAT	TTGGTGGTAC	TGGATTCTGT	AGGAATCGGT	GCAGCACCAG	5280
ATGCTAATAA	CTTTGTCAAT	GCAGGGGTTC	CAGATGGAGC	TTCTGACACA	CTGGGACACA	5340
TTTCAAAAAC	AGTTGGTTTG	AATGTCCCAA	ACATGGCTAA	AATAGGTCTT	GGAAATATTC	5400
CTCGTGA AAC	TCCTCTTAAG	ACTGTAGCAG	CTGAAAGCAA	TCCAAC TGGA	TATGCAACAA	5460
AATTAGAGGA	AGTATCTCTT	GGTAAGGATA	CTATGACTGG	ACACTGGGAA	ATCATGGGAC	5520
TCAACATTAC	TGAGCCTTTC	GATACTTTCT	GGAACGGATT	CCCAGAAGAA	ATCCTGACAA	5580
AAATCGAAGA	ATTCTCAGGA	CGCAAGGTTA	TTCTGTGAAGC	CAACAAACCT	TATTCAGGAA	5640
CGGCTGTTAT	CTATGATTTT	GGACCACGTC	AGATGGAAAC	TGGAGAGTTG	ATTATCTATA	5700
CTTCAGCTGA	CCCTGTTTTG	CAGATTGCTG	CCCACGAAGA	CATTATTCCT	TTGGATGAAT	5760
TGTACCGTAT	CTGTGAATAC	GCTCGTTCGA	TTACCCTTGA	GCGTCCTGCC	CTTCTTGGTC	5820
GCATCATTCG	TCGCCCTTAT	G TAGGTGAAC	CAGGTAACCT	CACTCGTACG	GCAAACCGTC	5880
GTGACTTGCC	TGTATCTCCA	TTTTTCCCAA	CTGTTTGGGA	TAAATTGAAT	GAGGCTGGTA	5940
TCGATACTTA	TGCTGTGGGT	AAAATCAACG	ATATCTTTAA	CGGTGCTGGT	ATCAACCATG	6000
ACATGGGTCA	CAACAAGTCA	AATAGTCATG	GAATTGATAC	ACTATTGAAG	ACTATGGGAC	6060
TTGCTGAGTT	TGAAAAAGGA	TTCTCATTCA	CAAACCTAGT	TGACTTTGAT	GCCCTTTACG	6120
GCCATCGTCG	TAATGCTCAC	GGTTACCGTG	ATTGCTTGCA	TGAGTTTGAT	GAACGCTTAC	6180
CTGAAATTAT	CGCAGCTATG	AGAGAGAATG	ACCTTCTCTT	GATTACTGCG	GACCATGGAA	6240
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GCCCTGCCTT	TAAAGGAAAT	GGTCTCATTC	CAGTAGGACA	TTTTGCAGAT	ATTT CAGCGA	6360
CTGTTGCCGA	TAACTTTGGT	GTGGAAACTG	CTATGATTGG	GGAAAGTTTC	TTAGATAAAT	6420

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TGGTATAAGA	TGACGCGCTA	TGCTTTGCTG	GTGAGAGGTA	TCAATGTTGG	TGGTAAGAAT	6480
AAGGTCGTCA	TGGCGGAGCT	TCGTCAAGAA	TTGACAAACT	TGGGACTGGA	AAAGGTTGAG	6540
AGCTACATCA	ATAGTGGCAA	TATTTTCTTT	ACTTCGATAG	ATTCCAAAGC	CCAATTGGTT	6600
GAAAAGCTAG	AGACTTTCTT	TGCAGTCCAT	TATCCATTTA	TTCAGAGCTT	TTCTTTACTG	6660
AGTCTAGAGG	ACTTTGAGGC	GGAACCTGAA	AATCTACCAG	CTTGGTGGAG	CAGAGACTTG	6720
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GTTGAAAGTT	TAGAGCTGAA	AGATGAAGTG	CTTTATTTTG	GAAAACCTGG	GATTTTCTGG	6840
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CCTTTCTACC	GCCACATTAC	TATTCGTAAT	GCTAAACCTT	TTGACAAAAT	TGGTCAAATG	6960
CTAAAAAAT	AATAAAGGAG	ACACACAATG	ACATTTTTAA	ACAAAATCCA	TGAAACTGCT	7020
ACTTTCCTGA	AAGAAAAGGG	AATTGCAGCC	CCTGAGTTTC	GTCTAATCCT	TGGATCAGGA	7080
CTTGGAGAAT	TGGCAGAAGA	AATCGAAAAT	CCAGTTGTAG	TAGACTATGC	TGAGATTCCA	7140
AACTGGGGCC	GTTCAACAGT	AGTCGGTCAT	GCTGGTAAAT	TGGTATATGG	TGAACTGGCA	7200
GGTCGCAAGG	TCTTGGCTCT	TCAAGGGCGT	TTCCATTTCT	ATGAAGGGAA	TCCTCTGGAA	7260
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AACATGACGG	GGCAAAATCC	ATTGATGGGT	GAAAACCTGG	ATGACTTTGG	CCCACGTTTC	7440
CCAGATATGT	CTAGGGCCTA	CACACCAGAA	TACCGTGCCA	CTGCCCATGA	AGTGGCTAAA	7500
AAACTTAATA	TCAAGCTTGA	TGAAGGTGTC	TATATCGGAG	TTACTGGTCC	GACTTATGAA	7560
ACACCAGCAG	AAATTCGTTC	CTATAAGACA	CTGGGAGCAG	ATGCAGTTGG	TATGTCTACG	7620
GTTCTGAAG	TTATCGTGCC	AGCCCACTCT	GGCTTGAAAG	TTCTGGGAAT	TTCATGTATC	7680
ACTAACTTTG	CGGCCGGTTT	CCAAGAAGAA	CTCAATCACG	AAGAAGTTGT	AGAAGTGAAT	7740
GAACGTGTTA	AAGGTGATTT	CAAAGGCTTG	CTTAAAGCGA	TTCTTGCTGA	ATTGTAAGAA	7800
AAAAGATTTA	AAAGGGGGAG	TGCCTCTGTT	TTTTCAGGAT	TGACTGCCTA	TCCGGATTAA	7860
AGAAGAAACA	GAGGAATACT	ATGAGCTTCT	TCCTGCTCTT	ATAACTGAAA	GAAGCGGAAG	7920
AATAGGTATG	TCTGATCTGA	TAGCCAGCAT	TGTGAAAGAC	AAGATTCTAG	GATACTAGCA	7980
TTAGCTTCCT	AGCCAAGCAG	ACTAGTATGA	TAAGGAGAGA	TGAGAATGAA	TTGACTTTCT	8040
GAATTTCTCA	GTCTTATCAT	ATATAGCACA	ATGAGATTTT	GCTTGAGTCT	GCTTGTAAT	8100
AAACGAAAAG	AAAGATAAGA	AATAATGAAA	ATTGGTCAAC	GAATTATGCG	CTTTGGCATA	8160
AAAAATTAAG	TATCGGAGTT	GTATCTGTTG	TAGTCGGCTT	TGATTCTTAG	CTCCAGCTGG	8220

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AATTTTCAGCC	AATGAAGTAA	AGCAAGATGT	AACATCTGAA	GTGGTAATAG	GTGTGCTAGA	8280
TTCTAAGGAG	GAATTGAAAG	AGTCAGAAAA	TGATGCTCCA	AAACTAGAAA	CTCCTCTTAG	8340
AGAGGAGCCA	AGACTAGCTC	CTCAAACGCT	TCCGGAAGCA	AGTGAAGTTC	TTGAAAACAA	8400
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TAACCATGTA	TTGAGGAAAG	TGACAACTTT	CAGTGCTCCT	AAAGTGATTA	CTTCCAGAAC	8640
TGTTTGGAAT	GCTAAGAATG	GTTTCTGGGA	TGTTGGTTTG	GAAAGTCGTA	AATTAGCTGT	8700
TAGTGAAAA	ATTAAGCATT	ATGTGGTTGA	TAATGACAAT	GTTGTGACTC	CCTTGATTCA	8760
TAATAATCGT	GATATTGTTA	CATTTACAGG	TAATTCACGC	TTTAAACACC	GTTCTCGTGG	8820
CTATTTTGAA	AGTCCAATGA	ATGATATTCC	TAACTTTAAT	ATTGGTAAAC	AAGCTACCTT	8880
GGATAAACAT	GGTTATCGTG	ATCCGAAATT	GGATAAAGTG	CGATTCTTTA	AGAAACAGGC	8940
TCTGCCTCGA	TCTTCTAGTC	AACCAAGCGC	TGAACCAATG	GAAAATATTG	CCTCAGGAAA	9000
ACAGGTTACT	CAAAGTTCGA	CAGCTTTCGG	AGGAGATGCT	AGAAGAGCTG	TGGATGGCAA	9060
AGTCGATGGT	AACTATGGTC	ACAATTCTGT	CACTCATACA	AACTTCCAAT	CTAAGCCTTG	9120
GTGGCAAGTA	GATTTGGCTA	AAGAAGAAAC	CATTTCGCCA	ATCAATATTT	ACAACCGAAC	9180
AGACACTGCC	CAGGATAGAT	TGGCAAACCT	TGATGTCATT	CTTTTAGACA	GTTCTGGTAA	9240
AGAAATTGAG	TGAAAACGTA	TAACATCTCC	TAAAGATGTG	TCAGCACAAA	TTACGATTAA	9300
CCATAAAAA	GCGCGCTATG	TTCGGATTGA	GCTAGAAGGC	TATAATGCCC	TCAGTCTTGC	9360
AGAAGTTGAA	GTTTCTGCT	TTATAGCTAC	GAATGCTGAA	ACGGCGACAC	AAGTTTCTAA	9420
GCCAGTTCAA	CCAATCAGTC	AGACTCCTGT	GAAGGATAAA	ACATTGACAA	TTCAACACAG	9480
TGGAGCTTAC	ATTGCCCGCT	ACTCCATAAC	TTGGGAAGAA	GTTCCAGTAG	ATAAAGATGG	9540
AAACCAAGTT	GTTCTGTAGTC	ATTCTTGGGA	AGGAAGCGGT	CGCAACCAGA	CTGCAGGTTT	9600
TGTCCTCAAC	CTCCCAATCA	AAGAAAATAT	GAGAAATCTG	CGAGTTAAGA	TTGAGAAAAA	9660
GACGGGCCTA	CTATGGAATA	GATGGCAAAC	AATCTATGAA	AACAGACCAA	TTTLAGCTCA	9720
ACCCACCCGT	AAAATTACCC	ATTGGGGTAC	GACATTGAAT	TCCAAGGTGA	GTGACGATGA	9780
TGTCTTGTA	TCTGATGGTA	GAATGACAGT	TAGTTTGTCT	AGTTTATAAG	AAAGTACTAC	9840
CTGAGCTTGA	ATAGGACTCA	GGTAGCTCTC	TATGAAAGAA	CAAAATTAAT	ACTCAATGAA	9900
AATCAAAGAG	CAAAC TAAGA	AACTAGCCGC	AGGTTGCTCA	AAGCACTGCT	TTGAGGTTGT	9960

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AGATAAGACT	GACGAAGTCA	GTCACATATA	TAATCCAAGG	CGACGTTGAC	GTGGTTTGAA 10020
GAGATTTTCG	AAGAGTATAA	ACAGAAAGGT	AGAGCGCGTG	TTCTAATTG	AACACGAGTA 10080
GAAAACTTT	CTAAAAACAA	AAACGAAAGG	ATGGGTAAAC	TGTATTCGCT	GAAGTGAATA 10140
CGGGCGACTC	TCCTCTAAAT	CAAAATTAAG	AAAGGAATTG	ACCCACCCCT	AAAAGTAGTG 10200
GGAAAAAGAT	AGTTGATCTA	GCGAGCATCG	CTCACTGCGC	CCAACCTCCTA	TTTCCCTTC 10260
GCTTTTGTGAT	GGGTTTGGTA	TCTTCTCAA	TATAAAATAT	AAAATAAAGA	AAGGTAGAGC 10320
GTGTGTTTTG	ATTGAACAC	GAGCGGAAAA	CTCGGAAAAT	AGATAATCTG	ACTGAAAAAT 10380
CAGGATTTCT	CGTCAGGTTC	CTAATTTTCA	GTCGTTTTCT	TCTCGCTCTT	TGTATCATAA 10440
ATTATGTCTA	TCCATATTGC	TGCTCAGCAG	GGTGAAATTG	CTGATAAAAT	TCTTCTTCCT 10500
GGGGATCCTC	TTCTGTCTAA	GTTTATTGCG	GAGAATTTCC	TTGATGATGC	TGTTGTTTTT 10560
AACGAAGTGC	GTAACATGTT	TGGTTACACT	GGTACTTACA	AGGGTCACTG	TGTATCTGTC 10620
ATGGGAAGTG	GGATGGGAAT	GCCATCTATT	TCGATTTATG	CGCGTGAGTT	AATCGTAGAC 10680
TACGGTGTGA	AGAAATTGAT	TCGTGTGGGA	ACTGCAGGTT	CTTTGAATGA	AGAGGTTTCT 10740
GTTCGTGAAT	TAGTTTTGGC	GCAGGCGGCT	GCAACCAACT	CAAACATCGT	TCGTAATGAC 10800
TGGCCACAGT	ACGATTTTCC	ACAAATTGCT	AGCTTTGATT	TGCTTGATAA	AGCCTACCAT 10860
ATCGCCAAAA	AACTTGGTAT	GACTACTCAC	GTTGGGAACG	TTTTGTCTATC	TGATGTCTTT 10920
TACTCAAATT	ACTTTGAAAA	GAATATCGAG	CTTGGTAAAT	GGGGAGTCAA	GGCTGTGGAA 10980
ATGGAAGCAG	CAGCTCTTTA	CTATCTTGCT	GCCCAATACC	ATGTTGATGC	GCTAGCTATC 11040
ATGACCATCT	CTGATAGCTT	GGTCAATCCA	GACGAAGACA	CAACTGCAGA	AGAACGTCAA 11100
AATACCTTCA	CTGATATGAT	GAAGGTGGT	TTGGAAACCT	TGATTGCAGA	ATAATTATAG 11160
CCAAAAAGGG	GCTCTTTGTC	AACTGTAGTG	GTTTGAAAAA	AAGCTAAGCT	TGAGAAAGGA 11220
CAAATTTCTG	CCTTTCTTTT	TTGATATTCA	GGGCGATAAA	AATCCGTTTT	TTGAAGTTTT 11280
CAAAGTTCCG	AAAACCAAAG	GCATTGCGCT	TGATAAGTTT	GATGAGATTA	TTGGTCGCTT 11340
CCAGTTTGGC	ATTAGAATAG	TGTAGTTGAA	GGGCGTTGAC	GATTTTCTCT	TTGTTCTTTA 11400
GAAAGGTTTT	AAAGACAGTC	TGAAAAAGAG	GATGAACCTG	CTTCAGATTG	TCCTCAATGA 11460
GTCCGAAAAA	TTTCTCAGGG	TCTTTGTTCT	GAAAGTGAAA	AAGTAAGAGT	TGATAGATCT 11520
GATAGTGGTG	TTTCAAGTCT	TCTGAATAGC	TTAAAAATCTT	GTCAAGAATT	TCTTTATTTG 11580
TTAAGTGCAT	GCGAAAAGTA	GGGCGATAAA	AACGTTTATC	GCTsArTTTA	CGACTATCCT 11640
GTGAGATGAG	TTTCCAGTAA	CGCTTGATAG	CCTTGTATTC	ATGAGATTTT	CGTTCAAACCT 11700
GATTCATAAT	TTGAACACGA	AAACGACTCA	TGGCACGGCT	GAGATGTTGG	ATAATATGGA 11760



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AACGATCTAG	AACGATTTTA	GCACACGGAA	AAAGCTGTTT	AGCCAAGTCA	TAGTAAGGAC	11820
TAAACATATC	CATCGTAATG	ATTTTCACTT	GACAACGAAC	GGCTCTATCG	TAGCGAAGAA	11880
AGTGATTTCG	GATGACAGCT	TGTGTTCTGC	CTTCAAGAAC	AGTGATAATA	TTAAGATTAT	11940
CAAAATCTTG	CGCAATGAAA	CTCATCTTTC	CCTTAGTGAA	GGCATACTCA	TCCCAAGACA	12000
TAATCTTTGG	AAGCCGAGAA	AAATCATGCT	CAAAGTGAAA	GTCATTGAGC	TTGCGAATGA	12060
CAGTTGAAGT	TGAAATGGCC	AGCTGATGGG	CAATATCAGT	CATAGAAATT	TTTTC AATTA	12120
ACTTTTGAGC	AATTTTTTGG	TTGATGATAC	GAGGGATTTG	GTGATTTTTC	TTTACCAGGG	12180
GAGTCTCAGC	AACCATCATT	TTTGAAsAGT	GATAGCACTT	GAAACGGCGT	TTTCTAAGGA	12240
GAATTCTAGA	AGGCATACCA	GTTGTTTCGA	GGTAAGGGAT	CTTAGACGGT	TTTGTGAAAGT	12300
CATrTTTCTT	CATTAGACTT	CCACAATCAG	GGCAAGATGG	AGCCTCATAA	TCCAGCTTAG	12360
CGATAATTTC	TTTGTGGGTA	TCCATATTGA	TGATATCTAG	AATCTTGATG	TTTGGGTCTT	12420
TAATATCGAG	CAGTTTTGTG	ATAAAATGTA	ATTGTTCCAT	ATGATTCTTT	CTAATGAGTT	12480
GTTTTGTCGC	TTTTTCATTAT	AGGTCATATG	GGACTTTTTT	TCTACACAAA	AATAGGCTCC	12540
ATAATATCTA	TAGTGGATTT	ACCCACTACA	AATATTATAG	AGCCCCAAAA	GGAAGCCCTT	12600
TATGAATGTG	AGGACTTCCT	TTTCTTATCC	AGAAATTGAT	CTAGCTCTCT	CTGATTTCGA	12660
AGAATAGTGA	CTTTATGTGA	ATATTCTTGG	CAAAGTTTTT	GGTAATTTTC	TTTTTGAGTT	12720
TTGCGGACGC	CCATCCCCAA	GAATCCATCT	GATAAACTCC	CACTCAAAGC	GTTTCAGGGCA	12780
ATCTACCGCC	ATACTTTCTC	TGACTTTTCC	ACGGTATTTA	AGATAACGCT	TAAAGGCTCT	12840
AAAGAGACAG	GTCAATGGCG	AAAAATTGAG	AAAGATGATT	TGGTCAGCTT	CTTGCATTCTG	12900
TTCTTGGTAG	TAGCACCAAG	AATAATTACC	ATCGATGACC	CAAGCTTTAT	GCTTGGTGAG	12960
AAAGTTTTTT	ATCTCGGTTA	ACATCCATTC	GCAGTCACTG	TCTTGCCAAC	CAGGTTGAAA	13020
TTGGAGTGTG	TCCATGTGCA	GTTTTGGAAT	GGAGTAGTAG	TTAGATAACT	TTTCTGCTAT	13080
AGTTGACTTA	CCAGAACCAG	AATATCCGAT	AATTGCGATT	TTCATTTTCT	ACCTTTTCCT	13140
ATTTGGAGAC	AAAAAAACAG	CCTCTATGGA	CTGTTTCTTA	TTTAACAAGT	TTAGCTGAAA	13200
GACGAGCTTT	ATCGCGGCTT	GCTTTGTTTT	TGTGAATCAA	ACCTTTAGTT	TCTGCTTTAT	13260
CGATAGCTGA	GCTAGCAGCA	CGGAAAAGTT	CTTCAGATGG	GTTTGCTTCG	AAAGCTTTTA	13320
TAGCAGTACG	CATAGCTGAT	TTTTGAGCTG	AGTTCTTTTC	GATTCGTCTA	ACGTTCAATT	13380
CAGCGCGTTT	GATAGCTGAT	TTAATGTTTG	CCAATGGTCT	TACCTCCATA	TTTACTAACT	13440

(2) INFORMATION FOR SEQ ID NO: 129:

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- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 8512 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 129:

CCTTTTTC	CAAAAGTAGG	AAAGGGTTTC	AAGAAAATTG	60
ATTGGAAATT	TTTGTAAAAT	CATAGAACTA	TTAGCTAATC	120
ATAGCTTCTT	TCAGGTCATC	TTGTAAACTA	TTTCTCTGGT	180
ACCAGACAGG	ATCTAAAGTT	GGAAAATTTG	TAAAAATCCT	240
TCAACAGTTT	TTATCCAAGA	AGCTACTTGT	TCTTGCTCCA	300
TCATAGATCA	CTCTTGCTAA	ACGCCAATCC	TCATCATCTG	360
TTAAATAGTT	GGCCAAGTAT	ATCAAATACT	TCATGAACCT	420
TGACAAACCA	CCTCTGTCAG	TAAATCGGCT	CCATGTGCAA	480
TGACTTGAGA	AACCCCTTGT	ATCCTTTTCT	TTTGAAAGAT	540
AGGACATTAC	GAATTCTCTG	AGAAGGATTT	CCCAAATGAT	600
TCCTGGTTAT	AATTTGGTTT	TTCTTCTGCT	ATTTTCTTTA	660
AATACCTCTA	CATTTCTAGC	AACTGTTCAA	AAAGGCAGTC	720
TTCTCAATTA	AATACAATCT	GATATAAAAT	GACGTAAATA	780
AGTAAGTTCA	AATTTAACAT	CACGACCTTC	AACGACATTT	840
GACAAATAGA	ATGACGCTTA	ACAAGCCCAT	AAACATCATT	900
CCTACTCTCC	CAACTCAGCA	CTATAGGAGA	TAATCTGGTC	960
GGATGGTATC	ACGGAGTGGT	TTGTCTGTTG	AAATATCAGC	1020
CAAGTGGTGT	CTTGCTACCA	CCTGATTTGA	GGAGATTGAG	1080
CAGAAATGTT	TAGATGAAGG	TAACCAGCAG	TCGAGATAAC	1140
AACTATACAA	GCCCATATAG	TAGTGAGCTT	GGCGCATCCA	1200
CAATTTCAAT	AGCATCTCCC	CAGAAATCCG	TCAAACTTTC	1260
TGCTTGCTCC	AAAGGTCTCC	CCTTCTTCAA	TCAATGTATA	1320
CTTCCAAGAG	GTGGGTGATA	AAGTTATGGA	AGTAGGTGTC	1380
CGAAGCGTTT	TTGACGTGGG	TCATTAGACT	GGTCTCCTCA	1440
CATTGAAGGT	TGACGGTGCT	TCAACATAGT	AGGTCGACAT	1500

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GATGATTGTC	TGAAAAGATG	AATTGACCAG	AATGCCCGAT	TTCATGAATC	AAGGTATAGA	1560
CATCGCTCAA	ACGGCCTGTC	CAGCTCATGA	GTACATAAGG	GTGTACGCGA	TATGGGTCCG	1620
CCGCATAACC	ACCGGAATCC	TTGCCACTGT	TAGCAGCAAA	GTCCACCCAG	CGCTCTTCTT	1680
GGTAACGAGC	AACTTCCTGA	CAATATTCTT	GCCCCAAAGG	TTCTACCGAC	TTCATGACCA	1740
AATCATAGGC	ATCGTCAATA	GTCAC TTCAG	GATT CAGGGC	GCTGTCCAAG	TCCAATT TCC	1800
AGTCTGCAAA	GGTCATCTTT	TCAAGACCAT	TTACCTTGGC	AACATGCTTG	AGGTATCTCT	1860
GAGCGACTGG	TGCAAAGTCC	TTCATGATGA	GGTCAATCTG	GCGGTCAAAC	ATGACACGGT	1920
CCACTTCTTG	TTCAGCTAGA	AGATAGTCAA	AGACAGAGTC	GTATCCCTTC	ATATCAGCCA	1980
AGAGTTTTC	AGACTTGACC	TGAGCCAGAT	AGGCTGCTGC	AGCCGTATTT	TGGTGCTTAC	2040
GAAGTCCCTC	TGAGAAGGAA	CGGAAGGATT	TCTCACGAAC	CTCAGCATCC	TCATGGTTTT	2100
GGTAGAAAT	CTCATAGGTC	ACAAAGCTGT	TTTTGTAGGT	CTTGCCATGG	GCTTCAAAGT	2160
CAGCCATTTT	AAAATCCCCA	GCTCGCATCT	TAGTATAAAT	GTCCTGCGGA	CTGTAGAAAA	2220
CTTCACCGAG	ATTTGTCAAG	GCCTTCTCCA	CATCTGCCCC	TAAGTAGTGG	GCTTTTTTGA	2280
TTTTAGCCTG	ACGAATGGCA	GCTGTTAAAT	GTGGCAATTT	ACCCAAACGG	TCCAAGACTT	2340
CCTCATCTGC	TGCCACCAAG	GCATCGTCAA	AGAAGGTCAA	GGCTACGCTG	GCATCTGTTT	2400
CAAATTCAT	CCCAGCTTGG	GCAATATTGG	CAAATTCGTC	ATTGCTATAG	TCCGTCGTCT	2460
GAGGCATAAA	ACCATAGTTG	CCAATATGGC	TCATCTGAAT	GATAGTCTGT	TCCAATTCCG	2520
CAAAGGCCTT	CTCGAAATCC	TCAAAAGTGT	GAAGATTGCC	CTTGTAATCA	CGGCTAAACT	2580
GGTTGATGTC	TTGCGAGCT	TTCTCGATTG	CACGCAAGAA	ATCCTCACGG	TCTTGGTATA	2640
GGGCTGTTAA	GTCCCAGAGT	TCCTTCTCTG	GAAAT TCTGA	ACGGTGTTTT	TGTTCCATTT	2700
TCTTCCTCTT	ATTTCTCTAA	TTCTACTAAA	ACACTAAGGG	CTGATAAAGC	GTAAAGCGGT	2760
GCTGTTTCTG	CTCGCAAAAT	ACGAGGACCT	AGGCCTGCCA	AAACGGCTCC	TTTAGCTTCA	2820
AAACTTTCGA	TTTCTGCAGG	TGAGAGACCG	CCTTCTGGAC	CAAAGATAAA	GAGCAGTTTG	2880
GCTCCTGTTT	CAAGACCAGT	GACTGCTTGC	AGAAGCGCAG	CGGCTTCTCC	TTCTTTAGCT	2940
GATTCTTCAT	AGGCTACTAT	GATAGAGTCA	AACTGGTCCA	GCTGAGCTAG	AAAATCTGCT	3000
TTTTTCTCGA	AAAGTTTAAT	ACTTGGTACA	ATATTACGCT	TGCTTTGCTC	GGCTGCTCCA	3060
AGGGCAATTT	TTTCTAGTTT	TTCAACTTTT	TTACCCAATT	TCTTGCCATC	CCACTTGGCA	3120
ACTGACCAGT	CTGCAGGAAA	GGCCCAGATT	TGGCTAGCCC	CCAGTTCGGT	TACTTTTTGA	3180
GCGATGAACT	CCAGCTTGTC	TCCCTTGGGA	AATCCAGATG	CGATGGTCAC	TTGGACTGGT	3240

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AGTTCCACAT	TGTCATTAA	TTCTTGGACC	AACTCAAAC	GACGATTTTC	CATATCCAGC	3300
ACGCGCGCCA	AGCGCTTGAT	GCCATCATCA	AAGACTAAGG	TAACCTCATC	CTCTTCTTTC	3360
AAGCGCATAA	CCTGAAACAT	ATGCTTACTG	GTTTCCTTGT	CCTCGATAGT	GACAGGAGAG	3420
ATAGCACTGC	CTTTTACAAA	ATACTGCTGC	ATGCTAGCCT	CCAATCACAC	CAGAGATATC	3480
CTTGGTTTTC	TTAAAGACAC	AGGTATTCCA	TTCCCCTTGA	ACCATGTGAG	TTTCGAGGAA	3540
AAATCCAGCT	GAFTCAGCCG	ACTGGCGCAC	CATGTCCAAC	TTGTCCCTGA	TAATGCCACT	3600
CATGATCAGG	TAGCCTTCAT	CCTTTACCAA	GCGATAAGCA	TCGTCTATTA	GATGAATGAG	3660
GATATCCGCC	AAGATATTAG	CCACAATCAC	ATCTGCCTCA	ATTTCCACAC	CCTTAAGCAA	3720
ATCTCCAGCC	GCTACATGGA	TATTTTCCAT	GCCAGGGTTG	AGCTCAATAT	TTTCCTGAGC	3780
CACACGAACC	GCCACATCAT	CCAGGTCATA	GGCGAAAATT	TCTTTAGCCC	CCAGAAGCGA	3840
GCTGGCAATA	GAGAGAACCC	CTGAACCAGT	CCCCACATCT	AGCACCGTTT	CGCCACCACG	3900
AAGAACCTGT	TCCAAGGCAA	AAAGGCTCAT	CTTGGTAGTT	GGGTGGGTTT	CAGTACCAAA	3960
AGCCATGCCA	GGATCCAGCT	TGATAATCAT	TTCCCCGCA	GTCGCCTCAT	AGTCTGTCCA	4020
AGAGGGAACG	ATGGTCAAAT	CATGAGTGAT	ACGAGCAGGT	TCATAGTATT	TCTTCCAGTT	4080
GTCTGCCAG	TCTTCCTCAG	CCAAGGCAGT	CGTACCTATT	TTTAACTCTC	CCAAATCCAT	4140
AAAATCTGTC	AATTCTGCTA	GACGAGCCTG	CAAATCCGCC	TCAACCACTG	TCACATCCAC	4200
CGTGTGAGG	TAGTAGGCTG	TCACTACGAT	TTCTTCTTGC	TGCTCCACCT	CTGGGAAAAT	4260
CTCTCCAAAG	CGGTCCACAT	TTCCCACATA	GTCCATACTG	TCTTCGATTG	CGACTCCTTG	4320
CGCTCCCAGC	TCAATCAAGA	GATTGGAAAC	CAACTCCTCT	CCCTCACGCT	TCACTGTAAC	4380
TTTTAACTCT	TGCCATGTTT	CCATTATTAA	TACCAAGCCC	GTAACACACA	AAACCAAAAT	4440
AGGAAATTCT	CTGAAGACGC	TTGTGTCTAA	GAGAAGTTTA	TCTTTTGGC	ACAGTGTTTA	4500
GGGCGGGTTC	AGTTTGAAG	TGTAAGTAA	CCATCCTTTC	TAATCACTTA	CTTTTAAATA	4560
ATCTTTTAAT	CTCTCTTGCA	ACTGAGGCAC	AACTTGACTG	GAACAAAGAA	ATTCCTCAAC	4620
ATTCATCAGC	TGATAGCCCT	GTCCTTCATC	TCCGAAGATG	ATATTGTCAA	ATTGTTCTTG	4680
TCTTAGCTGA	CCAACCATAA	AGACCGATTT	CTTGCCCTTA	AAAATTACGC	TAGGATAAAT	4740
CTTGCTCCAA	AGCAGACAGT	CTTCATCTAA	ATGAATTCCC	AGTTCCTCAT	AAACTTCACG	4800
CCGAGCGCAT	TCAAAAGGGC	TTTCGTCCCC	TTCACGGCCA	CCACCTGGCA	GTTCCCACAT	4860
ATTGGCCAG	GGAATACTTG	CCTTATCATC	GCGTAAGATA	GTCAAAAGCT	TATCCCCACA	4920
AAACAAAGCA	ATCTTGCAAC	CTGTGAAATC	AGAAATTTCT	AGTTCCATCT	TCAGTTCCTT	4980
CTAACATTTT	CTTTTCCAGC	TCGGCTAACC	AGTTTTCATA	ATATCTTTTC	TCATCCCTCA	5040

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ACATTGCGACT	ACTATCCATT	TTCTGTCTAG	CAATCTTGAG	AGCCTTACGA	GTTGCGATCTA	5100
CATCTTTCTT	CACCTTTAAT	TGATACCAGG	CTTGTATCAC	TTGAAGATTG	GACAGTTTGA	5160
GAGACAGAAA	CGATTTGACC	TGTCGAATAC	TAGCATATTG	CTCCGCTTGC	TCAAAATCTC	5220
CTTCCAACAA	GGCGATATGA	AGCAGGGATA	GTTGGGCAAC	TGTCTGCATC	ATCGGAGTAG	5280
TTGTCTCTC	AAGTAATGCT	TGAAACTGCT	GTTTAGCTAC	TTCTTCCTTC	CCTTCCAAAA	5340
TGGAACTTC	ACCTTGCCATA	CCTAATACAC	CATCCGCAAA	ACTCCCTCGT	GCATCCTCAG	5400
GAACGCTTG	AACAAAGTCT	TTCAAATCAT	ATTCTTGAGG	AGCTAGCAAG	GTCTGGGCAG	5460
AATGTCTCAA	TACCAGGTAG	GCGTATTGG	TATTTTCAGG	GTGTTGTAGT	AATTCCCAAA	5520
TTTTTGCTCC	ATCGGTGATG	TCGACTGGCA	AAATGTTATT	TAGGAAGAAA	GATAAATTAA	5580
GAAAAATCCA	AGTCCCTGCA	AAATACCAGC	TTCTTGCTCA	AAATCCAAAC	AATATCGCCA	5640
ATAATATCAA	GCCGAGATGA	ACCATCAAGC	CTCCTGAAAG	CATCAGGATG	ATTCTTTGAT	5700
CGCTTTCATC	CTCTTTTAAA	CCAATGTATT	GAGCACCAAC	ATTTTTCAGA	ATGGCTGTTC	5760
TACTAAGATG	AAACCTGCCT	GACTTTTGG	TCAAAATAAA	ATGTCCTAAT	CCAAAAGCCA	5820
CCAGCCGATA	GCCTGTCAAG	TAGCCACAAA	AAGCATGACC	CAGCTCATGA	AGAATAAAGA	5880
TTAAATACAT	GCTTAGAAGA	GCGAAGGCAT	AACCAAAAGT	AAAGGCTAAA	ACTGCGGAAT	5940
ACCCCAACTC	TGCAAAATGCG	ATTGTTCCAC	AAGCAAAAGC	TAGCATAATA	AAGACAACAG	6000
CTAGCACATA	AACCAAAATA	GTCCCAATTT	TCTTCATAAC	ACCTCCAACC	AACTCCTAGT	6060
ATCTTGATA	AGGATAAAAT	TCTCCCTTTT	CCAAGCCAAT	TTTTCTTCT	TCAAAGACTT	6120
CTTGGTTCCA	TTCCATGACA	AATTCCTCTG	CTTCTGGGTC	TTCCAAAAAG	TCCATGAGGA	6180
CATCTAGCCC	AACCTCAGCA	GTATCTTTAA	GGAAAAGCGC	AAAATAAGCT	AAAAATTCAC	6240
GGGAAAATCC	TTTTTTAGGC	AGGTAAGGAA	TAACAGTCAA	ATAGTCTTCC	TCATTGACTG	6300
TTGACTTGGC	AGGATTGTAG	AAAAGGACCG	CTTCCTCAAA	AAGAATGTCA	TCTGATGAAA	6360
CCTCTCCGTC	TTCATCCACC	ATCTCCACAC	CGCAGCATTT	TGCGCTTCCA	ATAGAAAAC	6420
CACCTTCTACC	GCATGGTTGC	GTTTGTCCCA	GCTAATCTCA	AAGTCAAAGG	GAAAGTTCTT	6480
GTCCAACTCT	TCCTCTAAAA	TATCTAAAAA	TCCGTATGTT	GCCATTTTGT	CCTCTTTCTA	6540
TGCGACTCTT	TAATCGCCCC	GATTGCTCGG	AAATATGCTA	AAATAGATAC	TACCATCTTA	6600
CCACAAAATT	ATTTTATGTC	CTAATTATAC	CATATTACCT	CATTTAAACC	CTTGGTATCA	6660
GTGATTTTCT	TAAAAGTCTG	ATTTCTTCAT	TTCTCATAAA	AATCAATATA	AAAAGCCCTC	6720
GAAAGGGCTA	ATAAATCTAT	AAAATCAATA	GGCGAGTAAC	TAGCACAAAG	GGACGTGCTT	6780

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TTTTATTGAC TATTACCACG ATACCACGCT TAATCTTAGG CTTGAACTTT CTTATCTGCA	6840
ATAGCGTCTG TCAAAGTCTG AGAAAAGTTA AGCCCCATTT CTCGTCCCAA CTTATCTGCC	6900
CATTTTGGTA TGGTCAAAGT CTTTTTAATG GGTTCCTGAC TTCCTAGGTA TTCTGATACA	6960
TCAACAGATA CCATAGAAAT AAAAGATTTA TCAAGGTCAT AGGTTGACAC GAAATCTTCA	7020
TCATCTTTAA AAGGATCATT ATCAATTAAA GACAAGCTAT TGATATCTGA TGGCTGAGGT	7080
AACTCTCCAT CACTCTCTAT CAAATCTGCA ACAGTTATCC CTAGCCACTC CGACCCCAT	7140
GCCAAAGCCT CAGAAATCCC CTCTCCTTGT GTAGCTGAGT ATTCAAAATC TGGGAAATGG	7200
ACAAAATAAG TCGCTTCTGT TCCGTCTGTG TCGTCATAAT AAAATAAAGC TGGATACGTA	7260
ACTAACATTT CACTACCTCC ATATCAAAAA GCAGGGACTG AATTTTACAA CCCAGCTTGC	7320
TTTCTTATCC CTCTTTCAGT GTACTTATTC AGCTCACCAT GAAGGATTGT GATAGGTCTT	7380
TCCCCTTGCT TTTCCATTTT AATATGGGAG CCTTTACCGC CTCTAGTCTT TATCCAACCA	7440
TGGGCCGTAA GGAGTTTAA CACTCTTTTT TGTGTCATAG GCATAGCGCT TTTACCTCCT	7500
GACAACACCA TTATAACACG TGTTACACGT ATTGTAAAGG AGTGATACTT ATTATCTAT	7560
TATACATAAA AGCCCTAGA TGTGGTTCTA AGGGAAGCCA ATTTATTCAT ACCTATTTTT	7620
CTAATGAGTA GTAAAACTG CTTCTTTATC GAGCAATTCA TCATCTGTAT AGTCAATTGT	7680
AAAAGTATCT CGATCTAAGA CAGATTGAGG CGGAGTTGAA TGAATCATAG GAACACTGCG	7740
TACTCTATAT TTTTATCTC CAATTTTAC AAAGTGATAC TCTTCGAAAA TCAAATTCAA	7800
ACCACGTCAA CGTCGCCTTA CCGTACTCAA GTACAGCTG CGGCTAGTTT CCTAGTTTGC	7860
TCTTTGATTT TCATTGAGTA TGATTAACTC TCAAGTCTTC GAAATCAGGA TTTTCAACAG	7920
TTATTACAAG GAGGCGATTT ACTACTTCAA AAACATCAAT TATTCTATTT TTCATATTTT	7980
TTCAACCCAT TATTAGAATG AACTTCTTGG TAAGCAAAAT CAAGTTTAGA TTTAATGTTT	8040
TCGTACAAAT CTAAAATCTC TTTTGGAGTA TCTTCCCGGA AGAAAAGTTT TCTTTTCCCT	8100
GAAATAACTT GATCACTAAG AATCCAATGA CGAATTTGTT TTGTAAAAAT CAAAATTTCC	8160
TGACTTGGTA GTTCCATCAT TTCCATTGCT TATCACCTCT CTTTTCATTA TAGTTCATAC	8220
AATGACATTC AGCAATATTA TTTCTCAAGT CAGCACTTCC ACTTCTTTAG GCTCAACTAT	8280
CCTATTTTGA GCTTTAAGGA AAATCAAATC TCTCATGCTG ATACCTCTCC TCATTAAATT	8340
AAATAGTAAA AAAGATTCTA TCTCACTCCC TGATTATTAC AAAACCATTG AAATATCACA	8400
ACTAATAGGC TAGAATGGAC ATAGTAAGAT ATAGTAGATG AGTCATTCTA CTCAAATCCA	8460
CGTTAGAAAAG GACTGCTATG CCAGACAATC TCGCCGTTTC CATGCGCCCG GG	8512

(2) INFORMATION FOR SEQ ID NO: 130:

895

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 2869 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 130:

CTCGTTTCAA GGTGAGTCT CTTGCAAATC TTGTCGCGT TCTTCCTTTT GCCAAGGCAT	60
CTCTCCCATG GTTGGTGCCa GCCATTGTTG GAATCTTGCT CTCATTGGTT CTACCAAACA	120
AGCAAGAAAG CGATGTTTTT GAAATGGAAT AATCACTTAA ATCACTTTTG TAGCCAAGTC	180
TACAGGAGTG ATtkTCTTTT TTTATCCGAT GATAAATGTG TTATAATAGG TAGCGAAAGA	240
GGTGAAGAAA TGAATCAAAC AGTAGAATAT ATCAAAGAAC TGACAGCCAT TGCgtCGCCA	300
ACAGGCTTTA CTCGTGAGAT TGCGGACTAT TTAGTCAAGA CTCTAGAAGG TTTTGTTTAC	360
CAGCCGGTTC GCACATCCAA GGGCGGTGTC AATGTAAC TAATAAGGTCA AAATGATGAG	420
CAACATCGCT ATGTGACTGC CCATGTAGAT ACGCTTGGTG CTATTGTCCG TGCTGTCAAA	480
CCAGACGGCC GTCTCAAAAT GGACCGTATC GGTGGCTTTC CTTGGAACAT GATTGAAGGA	540
GAAAACGTGA CCATTCATGT GGCTAGCACA GGTGAAAAAG TATCAGGAAC CATCCTCATC	600
CACCAAACCTT CTTGCCATGT CTATAAGGAT GCAGGAACTG CAGAACGCAC GCAAGACAAT	660
ATGGAAGTGC GTTTGGACGC CAAAGTAACT AGTGAAAAAG AACTCGTGC TCTTGGCATT	720
GAGGTCGGTG ATTTTATCAG TTTTGACCCA CGAACTGTCG TGACAGAGAC AGGTTTTATC	780
AAGTCTCGCC ATTTGGATGA CAAGGTCAGT GCGGCGATTT TGCTCAATCT CCTTCGCATT	840
TATAAGGAAG AGAAGATTGA ATTGCCCCGTA ACAACTCATT TTGCTTTTTC AGTCTTTGAA	900
GAAGTGGGAC ACGGTGCAAA CTCTAACATT CCTGCTCAGG TAGTAGAATA TCTGGCTGTG	960
GATATGGGAG CCATGGGAGA TGACCAGCAA ACAGACGAAT ATACAGTGTC TATCTGTGTC	1020
AAGGATGCTT CTGGACCTTA TCACTATGAC TTCCGTCAAC ATTTGGTGGC TTTGGCGAAA	1080
GAGCAAGATA TTCCATTAA GCTGGATATC TATCCATTTT ATGGTTCGGA CGCTTCAGCG	1140
GCTATGTCTG CAGGGGCAGA AGTCAAACAC GCCCTTCTCG GTGCTGGTAT AGAGTCTAGC	1200
CATTCCTATG AGCGTACCCA TATTGACTCG GTGATCGCAA CAGAACGAAT GGTCGATGCT	1260
TATCTTAAGA GCACGTTGGT GGAATAATAT GTGCCTTATT TGTCAGAGAA TTGACCTCAT	1320
CAAGAAGGAA GAAAATCCTT ACTTTGTCAA AGAGTTGGAA ACAGGCTATC TTGTGGTTGG	1380
AGACCACCAG TATTTTGAAG GCTATAGTCT CTTTCTAGCC AAGGAGCATG TCAGCGAATT	1440

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GCACCATTTG AAAAAGGAGA CAAGACTCCG TTTTCTAGAA GAAATGAGTT TAGTCCAAGA	1500
GGCAGTTGCC AAGGCCTTTG CTGCTGAGAA AATGAATATC GAACTGCTAG GAAATGGCGA	1560
TGCTCATCTT CATTTGGCATC TGTTCACG ACGGACAGGT GATATGAATG GTCATGGTCT	1620
CAAGGGTCGT GGACCACTCT GGTGGGTTC CTTTGAAGAA ATGACAGCAG AAACCTGCCA	1680
AGCAAAACCG GATGAGATTA AAAGATTAGT CAAACGTTTA TCGTCAGAAG TAGATAAACT	1740
ATTAGAAATA AAGGAGTAGA AATGAAGAAA AGATACCTAG TCTTGACAGC TTTGCTAGCC	1800
TTGAGTCTAG CAGCTTGTTT ACAAGAAAAA ACAAAAAATG AAGATGGAGA AACTAAGACA	1860
GAACAGACAG CCAAAGCTGA TGGAACAGTC GGTAGTAAGT CTCAAGGAGC TGCCCAAG	1920
AAAGCAGAAG TGGTCAATAA AGGTGATTAC TACAGCATTC AAGGGAATA CGATGAAATC	1980
ATCGTAGCCA ACAAACACTA TCCATTGTCT AAAGACTATA ATCCAGGGGA AAATCCAACA	2040
GCCAAGGCAG AGTTGGTCAA ACTCATCAA GCGATGCAAG AGGCAGGTTT CCCTATTAGT	2100
GATCATTACA GTGGTTTTAG AAGTTATGAA ACTCAGACCA AGCTCTATCA AGATTATGTC	2160
AACCAAGATG GAAAGGCAGC AGCTGACCGT TACTCTGCCC GTCCTGGCTA TAGCGAACAC	2220
CAGACAGGCT TGGCCTTTGA TGTGATTGGG ACTGATGGTG ATTTGGTGAC AGAAGAAAAA	2280
GCAGCCCAAT GGCTCTTGA TCATGCAGCT GATTATGGCT TTGTTGTCCG TTATCTCAA	2340
GGCAAGGAAA AGGAAACAGG CTATATGGCT GAAGAATGGC ACCTGCGTTA TGTAGGAAAA	2400
GAAGCTAAAG AAATTGCTGC AAGTGGTCTC AGTTTGAAG AATACTATGG CTTTGAAGGC	2460
GGAGACTACG TCGATTAATA CTCTTCGAAA ATCTCTTCAA ACCACGTCAG CGTCGCCTTA	2520
CCTACTGACT GCGTCGGTTC TATTCACAAC CTCAAAACAG TGTTTTGAGT CGATTCGTCA	2580
GTTTTATCTG CAACCTCAA GCTGTACTTT GAGCAstGCG GCTAGCTTCC TAGTTTGCTC	2640
TTTGATTTTC ATTGAGTACA AAAAGTAAAC TTTTCTCTTG CAATTCCAGA TAAATAGTGT	2700
ATAATGGATG GGTATGTGAA AACATACTT GTGGGAGGTA AAAATCTCTA ATTACCGCCA	2760
AAACCACAAA GGAGGATTTA AAAATGGCTA AAAAAGTCGA AAAACTTGTA AAATTGCAAA	2820
TCCCTGCTGG TAAAGCTACA CCAGCTCCAC CGGTTGGACC TGCTCTTGG	2869

(2) INFORMATION FOR SEQ ID NO: 131:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 6186 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 131:



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CTGAATCCCT TATAGGAGTC CAGTAACTTT TTAGCCTCTA CTTTGCCTTC ATAGGCAGCT	60
TCAACATCAT TAAAAAAGA AIGCACTGAA GCAAGTTCTT CAGTGCTCCA CGACAAATCT	120
AGTGGGTAAC TATACTGTTT GTTCATTAAC TAATACCAGC TCTCATTCTT GCTTCTTTTA	180
GTTCTTGCTT ACGATAACTA CGAGGGAGAA AAGCACGAAT CTCATCTTCA TTAAAACCGA	240
TTTGCATACG CTTGGCATCA ATAATAATG GACGACGAA AAGACTAGGA TACTGCTCAA	300
TCAAATGAAG CAATTCCGAT ACCGAAATAC TCTCTACATC AATATTCAAT TTTTGAAAA	360
TTTTTGAAAG AGTTGAAATG ATGTCATCAG TACCATTTTC GGTCAAGGAA AGGATGTGTT	420
GCAATTCTTT TCTTGTTAAA GGACTGGTCA TAATATTGTG TTCCACAAAG GGAACCTATG	480
TTTTTCTAAC CAGGCCTTAG CCTTACGACA TGATGTACAG CTCGGTGATA GAAATAGTGT	540
AATCATGCTT TTCTCTCTT ATCTATACTT TGCTACTTCT ATTATACAAA AAAATAAAGC	600
GCTTGACTAG GGATTTTLAG AAAAAAGCC TATTTTTCAG AAAAAATAG GCTTTTTCG	660
AACGATTGAC ACAATTGGAT TTGGTTAATT CACTCTTAAC GATGGTTTAA AACGATATAT	720
ATTTTATAT ATGTAAATTA AAAACATCTT TCCTTTCACT TCCTACGACT TTTCAGATAC	780
AGATAGCCAA AGAAGTTTTC ATAGAGGGCA AAAAAGAGGA GGAAGGCATG AAGAAAGAAG	840
GTCTCTGGCA AAATCATAAT AACAGGATCC TTGGCTGGAT CAAAAGCCA GGTATCATCT	900
CCCACAAAGA GAATTTGATG GAAAAGACTA AAGAATTGGT CAAAACCAAT CAAAACCTCC	960
CCAAGTCCAA TCATCACAGG TAAGACTACT AGAGCCAGGA GACTTTTTCG ATAAAGAGAC	1020
AAAAAGTCCT TTTTCACAAT CCTATTGACA AAGACATAGA AACTTGGCAG TGTCAC TAGA	1080
GCTACTAGCT GAACCAAATG AAAGAGATTC TTGACCACTG CGAAATGGTG CAGACCAGCT	1140
GCTGACGAAC GAAAATCAGG CATCTGTAAG ACCTGACTAA AAGGATTGGT CAGATAATTC	1200
ATCAAGATAT GAAAATTGTA TTGAATGGTT TCTGGTTTAA GATAGACTCG ATTTCGTTAAG	1260
TTTAGCCACT GAATCTCCAT AGGATAGAAA ATCCAAGCCA GATAAATGGT CAGAAGGATG	1320
GAGAGGGAGA GGAGAAAGAG CATAGAGCCC CAAAAGATCA ATTTAGTTTTT CATCAAAATC	1380
CCACTCCGCA AGGCTAGAAA CCACATGTGT CGGTGCGATT GGCAGGCCAG CTACTTCTTC	1440
TGCCTTAGTA AAACCTGTCTG TCACCAAGAG CGTTGGAATG CCATTGTCAA TCCCAGCCCG	1500
AATATCAGTC AAATAATTGT CCCCACCAT GATTAACCTC TCACGTTCCA AACCTAAGTG	1560
CTCAACCGCC TTGTCCATAA TGATGGCATT TGGTTTCCG ATATAAACCG GCTTCACTCG	1620
TGTCGCTACT TCAAGCAGCG TAATCAGTGA GCCAGCACCT GGCAAAAGAC CGCGTTCCGT	1680
CGGGATGTTG AGGTCAGGAT TGGTTCCGAT AAAATGGGCA CCCTTTTGAA TAGCAAGAGT	1740

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TGCTGTGGCA	AATTTTTCAT	AGTCGACTTG	CCAATCCAGA	CCAACTACCA	CGTAGGCAGG	1800
TTTTTCCTTG	TCTTCCACAT	AACCAGCCGC	CTTGATGGCT	TCCTTGAGTC	CTGCTTCTCC	1860
GACGACATAG	ACGGTCTTTT	CAAGCCCCAA	ATCATTCATA	TAGTCGATGG	TTGCCAAAGT	1920
CGCTGTGTAG	ACAGTCGATA	GGGGCGTATC	GATATTAAAA	TTCTGAGCCA	ACATCTCCTT	1980
AACACTCTCT	GGAGTGCGGG	TTGTATTGTT	GGTTACAAAG	AGATAGGGAA	TGTCCCGCTT	2040
TTGCAATTCA	TGAACAAAAG	TCTCTCCAGC	AGGGATTCCG	TCTTTCCCCT	TATAAATGGT	2100
TCCGTCTAAA	TCAATTAAAT	AGCCTTTATA	TTTCATCTAT	TTCTCCCTAA	GCCTTTTTTA	2160
TTTCTTGCCA	AGTAATGATT	GCTTGGGCAT	TGATAACCCC	ATCACTTGTA	ATTTTCATGCT	2220
TGCTTTCCAG	TCCAGTCCGT	TCAACAGCCG	ATGTAATCAC	CCCACCTGGT	CGAACTTCCT	2280
TGACATACTT	GAGGTGATT	TTCTTGGGAA	TATAGTGGGT	CAAAAAATCC	GCTCCCATGA	2340
CCTCAAAAAT	CCAGTCCAAG	TATTTACTGT	TATTGACATG	ACCATTTCATA	TCCAAGTCGT	2400
AAAAACGAAC	ATGGTAATCC	TTGCTGATCG	GTTCTTCCAA	GGACTCATAC	TTCGGTCCAC	2460
GGATAAGTTT	TTTATCAAAA	TCAGACTGGT	AAGGAGCCAC	AATCTCAGGT	TCAACAACAT	2520
GGACTTTTCG	ACTGTCGCGG	TCCATGAGAA	CAAAGGTCGC	CATCATGTGG	ATGAGCTCCT	2580
GCTCCGCTTC	ATTATAAATA	GTAAAGCGAC	GGTAGCAAAA	AAGTCGATTG	TAGCTCAAGG	2640
CTTCCGTTTC	GATGGTAATT	TCTTCCGCAA	AACGAGGCAA	ACGAACCACC	TCAATATCAT	2700
ATTCTACGAT	AATCCAGACC	AGATTATATT	CTTCCAAAAT	GGCCTTATCA	CTAACTCCCA	2760
GTTCAATCGA	CTGCATCCCT	GAAACTTGCA	GTGACAGCAA	AATCACATCT	GGAAGTTTGA	2820
TATGACCGTT	CATATCAGCC	ATATCAAAAG	GAATTTTCAT	TTTCATTTGA	TAAGTTAAGC	2880
CCATGATCCT	ACTCCAAAAT	AAATCGTTCT	GCTACAGTAT	CTCCCCAAAA	GAGACCTCTC	2940
TTTGTCATGC	GAACGTGGTC	ACCCTCAATC	TGCATGAGGC	CTTGTGTAAC	CAAATCTCTG	3000
ACAATTTCTC	CATAAAGTCC	AGCAAAAGAC	TGTCCAAATT	TTTCCTCAAA	TCGCGCCATG	3060
GAAACCCCGG	ATTCTTGCG	GAGTCCCAAG	AACATTTCTT	CTTCCATTG	CTCCTTTTGA	3120
CTCAGGTGAT	CTTCTGTAAT	ACAAGCATTG	CCTTCCTCAA	CCGCACTGAG	ATAATGACGA	3180
ATGGGACCAT	GATTTTTATA	GCGTACTCCA	TTGACATAAC	CAGATGCCCC	TGCACCAATA	3240
CCATAGTATT	CAGCATTGTC	CCAGTACATG	AGATTATGAC	GACTTTCAAA	ACCGGGTTTG	3300
GAGAAATTAG	AAATCTCATA	ATGCTCAAAA	CCCGCTCGCT	CCAGCTCTGC	AATGATGTAC	3360
TCAAACATCT	CCGCTTCTAG	TTCTCCTTA	GGCAGAGGCA	ATTTCCCACG	TCGCATCCGG	3420
TTCATAAAGA	CCGTATGGTT	TTCTAAAATC	AACTATACA	AACTCATGTG	GGGAATATCC	3480
AATCCAATGG	CTTTAGCCAC	ATTTTCCTTT	ACTTGCTCCA	TGGTCTGACC	AGGCAGAGCA	3540

TAAATCAAAT	CAATGGAGAT	ATTGTCAAAA	CCAGCCAGTT	TCAGGCGATC	GATATTTTCA	3600
TAAATATCCT	TCTCCAAATG	ACTGCGCCCA	ATCTTTTTC	ACATCTTATC	ATCAAAGGTC	3660
TGGACACCTA	GCGAAACACG	ATTGACAGCC	GAATTTTTC	AAACAGCTAT	CTTATCCGCA	3720
TCCAAATCGC	CTGGATTGGC	TTCAATGGTC	AACTCTTCCA	AGACAGACAA	ATCCAAGTTT	3780
TTAGTCAAGC	CATTCACTAA	CACCTCCAGT	TGCGGAGCCG	ACAGGGCTGT	CGGTGTTCCA	3840
CCACCGATAT	AAAGGGTTGA	CAACTTTTCA	ATATCATAAG	AACGAACTC	TTCCAGCAGA	3900
TGCTCTAAAT	AGCTGTCGAC	TGGCTGATTT	TTGATGAAGA	CCTTTGAAAA	ATCACAATAA	3960
TAACAAATCT	GGGTACAAAA	TGGGATGTGC	ACATAGGCTG	ACGTTGGTTT	TTTCTGCATA	4020
GTAATTATTA	TACCACAAAG	ACTAGATTCC	AGATAAAAAT	CACCATCCCC	AGATACATAG	4080
TCCGTCCGGA	GATGGTGATG	GTTTATTCTT	CTGTTATATC	AATCACAATC	TCTTCTGAGT	4140
CATCAAGAGC	TTTCGGCTTTT	TCTTGCCATT	GCTCCTGAG	ATTATTTAAT	TGATTTTGTG	4200
ATGCTTCTGT	CGCTTGAAAA	GCATAGGATT	TAGTTTGAGC	AAGTATACTG	TCCACAGTGA	4260
TTTCACCTGA	CTCAACCTGT	TCTTTTGTTT	TCAGAACAAA	ATCTGTAGCC	TGCTCCTTAA	4320
CTTCTGTCAG	TTTTTCACAG	ACTTGCTCCT	TGGCATACTC	CGGATCTTCT	CTCAAATCAT	4380
CTAGAAAATC	TTGAGCCTGA	CTGCAAACTT	GTTTGCCCTT	ATCATTGTTT	AAAAACAAGG	4440
CAAGAGCTGC	ACCTGAAACG	GTTCCATAAA	GGATTGAGGA	TAATTTACCC	ATAAGGATTC	4500
TCCTTTTTTA	TTTTTTGAAA	AATTTACTTG	CAAGACGAAG	AGCTGACAGA	CTTGCAACCAG	4560
TCTTGAGTGT	TTTTGAACCA	GCTGATGAAG	CTTCTTGCT	CAAGACACGC	GCATGGTCAT	4620
TGAGGTCTGA	AACAGATAGA	GATAAATCTG	CAACAGCACT	GAAGAGTGGA	TCAATCGTAG	4680
CCACCTTGAC	ATTGATATCA	TCTGCCAAGA	CATTGACCTT	AGCCAACAAC	TCATTGGTGT	4740
GATGCAAGGT	CACATCCACA	TCTGAAGTCA	AGGTTTAAAT	CGTCTTTTCT	GTTTCATCGA	4800
TGACACGACC	AAGCTTTTGT	ACAGTAATGA	TCAGATAGAC	CAAAAAGACA	ATCAAAGCTA	4860
GGGCAACAAG	AATATATGCA	ACTTCTAACA	TTTAGTTTTC	CTCCTCTGTA	ATATAGTAAG	4920
GGGCCTTCTT	TCGATTTTGA	TAAATAACGA	TCATTATACC	GAGACCGATA	AGGACAACCTG	4980
ACAGCCATTG	GGACACTCGA	AAGCCGAAGA	ACATGAGACT	ATCTGTTTCG	ATACCTTCGA	5040
TAACCATACG	ACCGAAACCA	TACCAAATCA	AGTAAAAGGC	CGTGATATGA	CCTCGTCTGA	5100
GACTCTTCCA	TTTCCGTCTA	AAAATCAGAA	TCAAGGCAAA	GCCAAGCAGA	TTCCATAGAG	5160
ACTCATAAAG	GAAAGTCGGT	TGACGGTAGC	TCCCCTCAAT	ATACATCTGG	TCACGGATAA	5220
AGCCAGGTAG	ATAATCCAGA	TTATCCACTG	TTGCACCATA	AGCTTCTTGG	TTAAAGAAAT	5280

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TACCCCAACG	CCCCAACTT	TGAGCAATCA	TAACGCTAGG	CGCCGCAATA	TCTAGAAAAT	5340
CCCAAGTATT	GATGAGTTTA	CGGTCAGCAA	AGATATAGAG	CACAAGAGCC	CCAGTTATCA	5400
AACCACCGTA	AATGGCCAAA	CCACCATTCC	AAATGGCAAA	AATCTCTCCT	AAATTCTGAC	5460
TATAGTAATC	AAATCGGAAA	ATAACATAGT	AGAGACGAGC	TCCTAAAATA	GCCAAGGGAA	5520
AGGCTACTAA	GATAAAATCT	AAAATATCGT	CTGGTATGAT	CTTCTTTCTA	GGTGCTTCTT	5580
TCATGGTCAA	ATAAACCGCA	AGAATCAAGC	CTGTCACAAT	ACATAAGGCA	TACCAACGAA	5640
TGGCTAGGGG	TCCTAGTTGA	ATAGCAATTG	GATCAAGCAT	TTTGACCTC	ATTTGAGCG	5700
ATTAGACTTG	TCAGTCGTTC	GTCGAACAAA	CGGGTCGCAT	CAAAGCCCAT	TTCCTTGGCA	5760
CGATAATTCA	TGGCAGCTGC	CTCAATCACA	ACAGAGATAT	TACGACCTGT	TTTAACTGGA	5820
ATACGAATAC	GAGGAATGtA	CGCCAGAAAC	TTCAAGTTCC	TCTGCATTAT	TTCCAAGACG	5880
ATCAAAGGTC	TTATGCGTAT	CGTAATTTTC	CAAATAGACA	GCAAGCTGAA	CCTGTGAAGA	5940
ATCCTTGACA	GCACTCGCAC	CGTAGAGACT	CATAACATCG	ATAATACCAA	CCCCACGAAT	6000
TTCAATCAAG	TGTTTCAAAA	TTTCAGCTGG	TTCACCCAG	AGAGTAATCT	CATCCTTGGC	6060
AAAGATATCG	ACACGGTCAT	CGGCTACCAA	ACGGTGACCA	CGTTTGACAA	GCTCAAGACC	6120
TGTCTCGCTC	TTACCAATTC	CACTATCTCC	CTGAATCAAG	ACGCCCATCC	CATAAATATC	6180
CATCAA						6186

## (2) INFORMATION FOR SEQ ID NO: 132:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 9541 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 132:

GAAAATCACA	ACCCTTTTGG	CAAAATTTTT	GAGATTATTT	TCACAAACTT	GATTTTTCAA	60
AGTATACTCA	ATAAAAATTA	AAAAAATCCA	CTACGTCAAG	GCGAGGCTAA	TGTGGTTTGA	120
AGAAATTTTC	GAGAGCGTG	AATGAGTATC	ATCTATAGTA	AAATAAAAAA	ACTGAACAAT	180
TTGGTTGGGG	ACAGCCAAAC	CAATTTCTCA	CAATGTTTCA	GAAACAAGGG	TGTGCTATTC	240
CAATTCAGC	CTACTATAAC	TGTCATAGAT	TGCTGAAACA	AAGTCTAGGT	AAAAGTCTTC	300
ATAATAAAAA	GACCTCCTAT	CAAGTGTTCA	AAAACCTTGA	TAGGAGGTCT	TGTTTTGTGA	360
AAATATTTAT	CAAATTTTCT	ATACAAGTGA	GCTGTTAGCC	AGGTTCTTTC	TATTCTTTCA	420
ATTTCAATGA	ATGGATTTTT	TACTAATACT	CATAACTGGG	AATTTGCTCTG	TGTA AAAATA	480

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GCGAGATAGA	TGGTATTTAT	AAAACACTCA	AGACAGCTAG	ACTAATATCA	TTTAAAACAT	540
TATCTTCTTT	TGAGCGACTG	TTGGTTACCA	ACATAGCTAA	ATTTCCTGCA	TTTTCAAATT	600
GATAGGGTTC	TGATTTAGCA	TTCAACAACCA	CCAAGAGGTG	TTCTTTGCCG	TGAACTTCAT	660
AGATAAGGTA	GCCGCTATGT	TCAATCGCAG	AATGCACAAA	GACATGATGG	TAAATTTTCAT	720
CATAGCTAGA	GTAAGAAAAG	GCACCAGTTT	TTGTCTTCAA	TCGGATGACT	TGACGGATAA	780
ACTCAATACT	GTCTTGACGC	TCATTAATCA	AGTTCCAGTT	CACTTGGTTC	ACACTGTCAG	840
GAGCATTATA	GCTATTCATC	GCACGCTCTC	TATCATCATG	GGTCAACTCA	CCATTTTCAC	900
CAGTCGCAAC	CAGTTTGGTA	CGACCAAATT	CTTGACCGAT	TTCCATAAAG	GCCATCCCCT	960
GCATGAGCAG	ATTCATGGCT	GTGGCAGTTT	CGACCTTGCG	CATGATTGTC	TCTGAACTTT	1020
GGTCTGGATG	AAGGGTTGCC	AATAAATCGT	GAAGATTGTA	ATTGTCATGG	GCTTCTACAT	1080
AGTTAAGCAC	CTGATTGGA	TGTGTATAGC	TTCTTAATTC	ACGACTTCCT	AGGATTGCTT	1140
TAGCTAGAAT	TGGCTCTGTC	GCAGCACCAC	TGACAAAACC	TGACTTGATA	GCACCATAAA	1200
CTTCTCCCCC	TTTGACAGCA	TCGCGCTGAT	TGTCATTAAA	GAAACCAATA	TTTGGCATCT	1260
GGTAGGCATT	GTCCTTCTTG	GCCTTATCAT	AAGGGGCAAG	ACCTGTTCCC	ATATCCCATC	1320
CTTCTCCATA	GAGGATAATG	TTGGAGTCGA	TTTCATCCAA	GCTTTGACGA	ATCATCTGCA	1380
TGGTCTTGAC	ATCATGAATC	CCCATCAAGT	CAAAACGGAA	GCCGTCAATA	TTATATTCTT	1440
GCACCCAGTA	TAGAAGAGAA	TCAATCATAT	ACTTGCGAAA	CATTTCTGTG	TCACTGGCTG	1500
TTTCATTTCC	AACACCCGTT	CCATTCTGGA	AGGTACCATC	TGGATTGATA	CGATAATAGT	1560
AATCAGGGAC	TGTTGTTTGG	AATGGTGCAT	CAACAACCTGA	GAAGGTATGG	TTATAGACTA	1620
CATCCATAAT	GACTCCAATA	CCCGCATCGT	GATAAGCTTG	AACCATCACC	TTCAAATCAC	1680
GAATGACCTG	AGCTGGATCA	TCTGGATTAG	TTGAAAAACT	AGTTTCTGGC	GCGTTATAGT	1740
TTTGTGGATC	ATAACCCAG	TTGTAGGTTA	CATTTCATC	CTCATCGTAT	TCTTTATCAC	1800
GGTCTGCAAT	TGGTTGCAAT	TGAACATAAT	TGTAGCCCAG	CTTCTTGATG	TAATCAAAAG	1860
CAGTTGACTG	GCCGTATTGG	TTAACTGTTC	CAGCCTGAGC	AGCACCCAAG	AAAGTTCCTC	1920
GAAGATGTTT	ATCTACACCC	GATGTAGGTG	ATTTAGTCAA	ATCACGAATG	TGCATTTTAC	1980
AGATAACTGC	CTTACATGGA	TTTTCCAAGC	GCCAAGTAGC	CTCCGAACCG	TGCTTAACCT	2040
CGAAGTTTTC	AACTTGCTTT	TCTACATGGC	TCAGAATAGC	TGAACGTTTG	CCATCAGGGC	2100
TGGTCGCGAT	TGTATAAGGA	TCACGTGTCA	GTGTTTGGTG	ATGAGGGAAT	TGGACTTGAT	2160
ACTGATAAGT	CTTACCTACC	AAATCTTCTT	CAACATCCAA	ACTCCAGACA	CCGATTGTAT	2220

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TGTCCTTATG ATTATAAGAG TAGCTATTGC CTCTTTTCAT CTCAAAAGTC TTCCAAACGG	2280
GTGCATCATT AGCAGCTGAT TCATAAACGA CAACTTGCAC TTCTGTCGCT GTAGGTGACC	2340
AGAGAGAAAA ATGAGCCTGA TTGTCCTCTA CACGGCAACC CAATTCTCCT TGGTAACCCC	2400
AATGATGATC AAAACTAGCA CTGTTAATGG CCTTATCAAA GGCAAAAGGA TTTTGATTTT	2460
TATAGAAAGG ACTGGCAATA GCAGGATTTT CAGAGTAATA AATCCTATCA TCGCCTTCCA	2520
AAATCCAGAC CTCTGTTAAT AGGGGATAGT GATTAAAACG GATAGAATAT TCTTTACTAG	2580
TTTGACCTGT ATGAACCACA AAATTCAAGC TTTCTATAAC ATGTGAACTT GGGTGTTCAA	2640
AGCTAAATAA AGCTCCAAAA TAATCTTCTT TG TAGGTTAG CAAATCAATT CGTTGATCCT	2700
GACTTTTAC AAAGGAGCAA GTGTCATATT CTCCATTCTT ACGATGGTAA TGAATGCGCA	2760
TAGGGTAGTT ATACATTTTT TATTTTTCCT TTTTACTTTG TTTCTATTTC ACTAATAAAT	2820
TTTTGTCAAT CTCGTCTCAA TTAACAGACA TAGTCATATT CTCTAAACTC TGTTTTTAAA	2880
CGATCCATTA CAAACTTTCT AGCCATGCCT CATCTCTGAC CTGGATACCA AGTTCTTGTTG	2940
CTTTTTCAG TTTACTTCCA GCGTCTGCAC CTACCACGAC GAGGTCGGTC TTTTATAGAA	3000
TACTACCTGT CACTTTGGCA CCCAGACTTT CGAGTTTACT TTTAGCTTCT GAGCGCTTGA	3060
GTGTTTCCAA TTTTCCTGTC AATACCACGG TCAAACCTGA CAAGGCCGCA TCCGCTACTA	3120
CCGTCTGTCC TTTATAGTCC AGATTGACCC CAGTTTCTTT CAATTCTCTG AGCAGAATTT	3180
CAGAGCCTTC TGTCGCAAAA TAAGTCTGAA GACTTTTGGC AATCACGCCA CCTAGACTTT	3240
CAATACTAGC CACTTCCTCT GAATCTGCCT GAGACAGATT TTCAATTGAA TGGAAATATT	3300
GAAGTAAAAG CTGACTAACC TTGCTTCCGA CATGACGAAT TCCCAAACCA AATAAGAGCT	3360
TCTCGGCAGA ATTTTCCTTT GATGCTTGGA TAGCCTGATA CAGTTTAGCA GCGGACTTTT	3420
CCTTAACTCC CTCTAAAAGG AGGAAATCCT CTTCTTGCAA ACGATAAATA TCCGCCACAT	3480
CCTTGACTAA ATTAGCAGCA AAAAGCTTCT CAACAATAGA TGGACCAAGG CCTGTAATAT	3540
TCATAGCATC ACGAGAAGCA AAGTGAATCA AGCCTTCCAT GATTTGAGCA GGGCAACGCG	3600
GATTGATACA ACGTAGGGCC ACTTCATCTT CAAAGTGCAA CAAGTCAGAG TTACAACCTG	3660
GACAGTTTGT AGGGATATCT AGTTTTTCTT CAGAAACCCG TTTGGACTCT ACCACACGTA	3720
AAACGGCAGG GATGATGTCA CCAGCCTTAT ATACAATGAC CGTATCGTCT TTTCGGATAT	3780
CTTTTTCAGC AATATAATCT ACATTGTGCA GGGTCGCACG GCTAACAGTC GTACCGGCAA	3840
GTTGTACTGG TGTTAGATTA GCAGTTGGAG TTACAACACC GGTACGGCCA ACTGTCCAGT	3900
CAACTGATAA GAGTTGAGCT TCTTTTCTT CGGCAGGGAA CTTGTAGGCT ACTGCCCACT	3960
TTGAGAGCCTT AACTGTAAAA CCAAGTTCTT CTTGACTTGC TAGGTCGTTG ACCTTGATTA	4020

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CCACTCCATC AATATCGTAA GGCAGATTTT CCCGTTCCCTG TCCTACTTCT TGGATAAAAT	4080
TCCAGATTTT ATCTATGTTT TCAGCCAAGA TTCGCTTAGG ATTGACCACA AAACCTAGTT	4140
GTTCTAGGTA CTTCAAACCC TTTTCTTGGC TATCACGAGT TGAAGGGCTG GCTTCTTGAT	4200
AGAGAAACGT TGCAAGATTA CGCTTGGCAA CTACTGCTGT ATCCAACCTGA CGCAGAGTTC	4260
CTGCTGCCGC ATTACGAGGA TTAGCAAAT CAGGCTCTCC ATTTTCTTGG CGCGCTTGGT	4320
TAAGTTGGTC AAAGGAAGCG CGTGGCATGT AACATTCCCC ACGAACTGTG ATATCTAGTT	4380
CTTCTGGCAA AGTCAAAGG ATGTCCTTAA CACGCTTGAG GTTTTCTGTG ATATTTTCAC	4440
CAATTGAACC ATCTCCACGT GTTACCCAG CAACCAAAAT CCCCTTTTCA TAAGTCAGCG	4500
AGATAGATAA GCCATCGATT TTCAGCTCAC AAATATAGGT CGGATGAGCC ACTTCCTTAC	4560
GAACACGCGC ATCAAAGCA TCTAGCTCCT CACATGAAAA AGCATCCTGC AAATAATAA	4620
GAGGATACTG ATGACTGTAT TTTTCAAAAC CATCTAAAAC CTTGCCACCA ACACGATGAG	4680
TCGGAAGTGC TGCTAGCACT TGCTCTGGAT AAGCAGTTTC TAACTCGACC AACTCACGGT	4740
AAAGGCGGTC ATACTCACTG TCTGAAACCG AGGGATTATC GCTGGTATAG TACTCAGTCG	4800
CATAGCGATT GAGCAAAGCG ACTAACTCAT TCATTCTTTT ATTCATAAGA CCATTTTACC	4860
ATAAAACAAG CCCTCCTCAC AAACGAGAAG GGCGGAAAAA AACTTAGTT TGAAATTATT	4920
TTTGAAACTC AAGCAACCTT ATATCAATTT TTCAAATGA GTTCGAACAT ATCCGAGAGC	4980
TAAGAAATAT AAGGCTACAA CTCCAAGTCC AATAATCAAG AAAGAATAAA GATGGACACT	5040
TGGCAAGACT GTCATAAATC CTTTGTCAAT AGGCATAAAT AGAATAGCTA AGGTAAAAAT	5100
TGTAAGTCACT ACTCTTCCAA GAAATTCGCT CTCAACCTTG GTTTGTACTT GAGTAAAAAA	5160
GTGAATATTA AAAATCGTCA TAAACAATTC ACAAATAAA TTTCAGAAA AGGAAAGAAA	5220
AGTTGGAAGT GGTAAATCCCA TCATAAAAAC TCCGACACCT GTCAAAGCCA GTAAATCAA	5280
AAGATTATAA ATATTAGCTT TAATTTTACT AGCTAGAAGA GCCCCAATGA TGGAACCAAT	5340
AGCCCCATA GTTAAATAC TTGCATAGGC TCCTTCTGAC CCGTAAAGCT GATTGAAAAA	5400
GGGAAGTAGA AATTCAAAAG CTGCAAAAAA GAAATTAACG CTGGAAGCTA CCAGCAAAAG	5460
GAAGAAAATT TCTTGCTGAT GCCAGATATA GTGTAACCCA TCCTTGATAT CTACAAAAAT	5520
ATCTCTCCCA GTAAAAGCCT TTTTCTCTTG AACTTTTGCT TCCTCTTTTG GAAGGAAAGC	5580
CACTAGAACA AAAGCAATGA AAAAAGTCAG CGAGCTAGC AGTAGCGTCA TATGGAGACT	5640
TGCAAACTGT AAAACAAGGA AGGAAAGAAC AGGAGAGCTA ACACCTACAA CCTGCAAAAC	5700
CAGCTCTAAG CGAGAATTAT AGATCACAAT CTCATCTTTC TCCACCACTT CAGTTATGAT	5760

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AGCTTTATTG	GCTGTGCGAG	AAAAGGCAAA	AGCAATAGCC	TGCACAATGT	TAGCAACAAT	5820
CAAAGCGCCA	ATCATCCAGC	TATCATTCCT	TATGAAAGAA	ATAGCCAGAC	AAAGAATCCC	5880
ACAAACAAGA	TCTGCCGTCA	TTAAATCTT	ACGACGAGAA	AAACGGTCTG	AAATAACTCC	5940
GCCAAAGGGA	TTGACGAGAA	TAGATGTGAC	GAGCTCAGAA	ATCTGATACA	TTCTTAAAC	6000
TGTCTGTCCT	ATAGTCCCA	TAGAAGCCAA	CCAGACACTA	TTTCATAAT	CATAGAGCAT	6060
ATTTCCCAT	TTATTGATAG	CCCCACGGCT	AATCAACTGC	ACTGCATAGC	GATTTCATATT	6120
AAAGCTCCTC	TCAAATTTTG	AAACTATTGT	ATCAAAACCG	AAAGGAGCTT	TTTATTTT	6180
CCCTTATTTG	GGAAAATTAA	CTTTTGACAA	ATTTTTCGTA	GTGTTCTCTGA	TAATAGGCTA	6240
CTTGCTCTGG	AAGACCTAAC	ACATCAAAA	TATGCATGGC	CTCTGCATC	TGCTTACAGC	6300
CTTCTTTACA	CTGTCCTTTT	TGATATAAGG	CAAAACCTTT	TAAATAATGG	AAAACATTAC	6360
GCTCATAAAG	CTTAATACCT	TTGTCAATAA	TCTTCTCTGT	ATAAGCCTCA	AAATAGTTGG	6420
CATTATAAAA	AGAAGAATGC	TCTAAACAAT	GCTGGTAACA	ATTGAGGGCC	AAAATCAACA	6480
CTAATCTCTT	ATGGCGACTA	ATCTCTTGGT	AAAATTCCTC	CCTCTCCATA	ACTTCTCTAC	6540
CAATCCGAGT	GACATAGTCT	ACATCGTAGA	AACTATAGAG	GTTACCGAAA	AGAATCAACT	6600
CATACATGGT	CCATTCTTCT	GTTTTGAAGA	GATAATCTGC	TACCTTACCC	AAATCATCCT	6660
GCTTCATATC	ATAACTCGCA	TCTCTTTGAC	AAATCAGACC	TTGTAGCAAA	ATCCAGTTCA	6720
GCTCAAAATA	AAGGGGAGTC	GTCGAACTCT	TAGACTTTTC	AAGTTGTTCT	CTTTGAAGCT	6780
TTTGAAAACC	TGCAATATCG	TTTGAATAGT	AAAGTGGGAT	AATCTGTGCC	ATCATAGACA	6840
CATGTTTCATG	ATTATGAAAA	TTCCTTGCCT	TATCCATGAA	ATTTTCGATT	GTTACATGAA	6900
TGTTATCCAA	AATCTCAAAG	AAACGGGAGA	CTGCCAGGTC	AGACTCCCCA	AGCTCAAAGC	6960
GAGATAACTG	AGAGGTAGAG	CAGGATTCGC	CTGCTGCTTC	CTTTAAAGAA	TAATTTCCAC	7020
TTGTTGCAAA	TTCACGAAAT	ACTTTTCCAA	GATGTTCCAT	CTTTACACCT	GCTCTGATAA	7080
TTCTTCCCAC	TCAAGCATAG	CTTCTTCCTG	ACGATGGCTG	ATTTTGTCCA	GCTCAGCCTG	7140
TAATTCCATG	AGTTTGTCGG	CATCGTTTGT	TTCCAACATT	TGTTTCAGAAA	TGGCTTGGCT	7200
TTGACTTTCT	AGCTCTTCAA	TTTCAGCTTC	TAGACTTTTCG	ATTTGTGCGA	TGAGTTTGCG	7260
AACTTCTTTT	TGACTTTCTT	TCTGGGCCTG	ATAGTCATTG	ACTGGACTTG	CTTCCTTTGC	7320
TTGATTGCTA	GTTGAAGCTT	CCTCAGTCTG	ACTCATTTCT	GCTGTTGCTT	TCTTCTCAAC	7380
ATAGTAGTCG	TAATCTCCAA	GGTAGAGAGT	TGAACCATTC	TCAGACAATT	CCAAAACATG	7440
AGTTGCCACA	CGATTGATAA	AGTAACGATC	ATGACTGACA	AACAGCAAGG	TTCCATCAAA	7500
GTCAATCAAG	GCATTTTCTA	GCACTTCCTT	ACTATCAATA	TCCAAGTGGT	TGGTCGGCTC	7560



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ATCCAGAATC AAAAAGTTAT TGTTTTCCAT AGACAATTTA GCTAAAAGCA AACGAGCTTT	7620
TTCGCCACCA GATAGCATGC CGACTGATTT TTTAACATCA TCTCCTGAGA AAAGGAAGGC	7680
TCCAAGACGG TTGCGGATTT CAACTTCTGG TGTGAGTTG AAATCATTC CAGATTTCATC	7740
CAGCACCGTA TTAAGTGGTG TCAGCTTGCT TTGGGTTTGG TCATAGTAAC CAACCTCAAC	7800
ATTAGCGCCA AAGCGCTTTT CTCCCTTGAT AAAAGGAATC TGGTCCACAA TAGACTTGAT	7860
AAAGGTTGAC TTGCCGATAC CATTTGGACC AACGATAGCG ACAGCATTCA TCTTACGAAG	7920
ATCTAGGTTA ATCGGTTGTG ACAAGACTTC CCCGTCATAG CCAACAGCTG CATTTTCAAC	7980
AGTCAAAACA ACATTGCCCG ACGTTTTTTC AGACTGGAAG GTCATGTTGG CTGATTTCTT	8040
GCCAGCTTCA GGCTTGTC AAGCTTCCAT TTTTTCAGT TGTTCACGGC GAGATTGAGC	8100
ACGTTTAGTC GTTGAAGCAC GAACTAGATT GCGATTGACA AAGTCTTCCA GAGCAGCGAT	8160
TTCTTCTGT TGCTTTTCAT AGTTTTTTC CTCAGTAACT AGCTTTTGCT CCTTCAATTC	8220
GACAAAACGA GAGTAATTCC CCACATAGCG ATCCAAGGAA TGCTTGGTCA AATCTAGCGT	8280
AATTGTCGCA ACCTTGTC AAGAAATAACG GTCGTGGCTG ACGATAATGA GGGCACCCT	8340
ATAGTTTACC AAGTAATCT CTAGCCAGGC GATGGTTTCA ATATCCAAGT GGTTAGTTGG	8400
CTCGTCCAAG ACCAAGAGAT TGGGCTTTTC AAGGAGCATT TTGGCAAGTG CCAAACGAGT	8460
ATTTTGACCA CCAGAAAGCT CAGCAATTTT CATCTGCCAC ATAGACTCGT CAACTTGAA	8520
TCCATTCAAA ATCGCTCGAA TATCAGCTTC ATAGGTAAAG CCACCTGCTT GGCAGAAATT	8580
CTCAGATAAG CGGTCATAAT CTGACATCAG TTTATCCAAA TCCTCACCAG ACTTTTCACC	8640
CATCTCCAGC TCCATCTGAC GCAGTTGTCT CTCCGTCCGA CGCAAATCAT TAAAGACATG	8700
AAGCATTTCA TCGTAGATGG TATTTTCAGA CTCAAAACGG CTATCTTGGG CTAGGTAAGA	8760
CAGAGAAATA TCTTTTTTCT TATGATTTC TCCGCTAGTT GGCTCCTCTT CTCCAATAA	8820
AATCTTCAAA AGAGTAGACT TACCTGCACC ATTTTCCCA ACAAGAGCAA TCCGATCTCG	8880
TTATCAACC TGCAGGTTGA TATTATCGAA AAGAACCTCT CTGCAAAAG AACGTTCAT	8940
TTTATTAGCT TGTAATAA TCATACAAGT AGTATAGCAT GTTCCCTAA GGCATTCAAG	9000
ATAATCGTAA GTCCTTTAGT ACACTTTTA TAACATAAAA TAACTAAAT TATGTATATT	9060
TTATATTAGA TTAAGTCACT ATCTTGTTGG ATTTTCTAAC CAGCTAATCT TGTTCAAAT	9120
AGTTATCGCA CAAGTCTATT ATTTAATCT TTTTCATCATT TACGTACGTA TAGCAGATTG	9180
AAATAAGATG AGAACAAATC GATTGGGAAA GTAAATTA TTTCTATAA TGTTTTAGCA	9240
ATTGTTTCGT ACTATTTTAG ATTCAGTCTA CTATATACAA TATTTTCGGA ACATTCAACT	9300

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TTTAACTCT ATTTATTACT AGATTTCATA ATTAAAAAAC CTACTGACCA AGCTAGAAAG	9360
CTTGATACAA TAGGCTTTTT AAAGACTGAT TATTTAACAG CGTCTTTAAG AGCTTTACCA	9420
GCTTTGAATG CTGGTACTTT AGAAGCTGCA ATTGTCATTT CTTTACCAGT TTGTGGGTTG	9480
CGACCTTTAC GTTCTGCGCG CTCACGAAC TCAAAGTTAC CAAAACCGAT CAATTGAACT	9540
T	9541

## (2) INFORMATION FOR SEQ ID NO: 133:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 3502 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 133:

TTGACTATCC TATCATGCTT TCTAAGGTCT ACTCAAGAAA ATCATTTTCA AGTTTTCACA	60
CCTTTCTCAA AAAAGTTAAA AAATTTTCTC AAAAACGCTT GACTCTGACC TAAGGCGAAG	120
GGTTATACTA TCATTGTAAG GAGGAAATCA TGTACCATAT AAAAGAAGCT GCGCAGCTTT	180
CAGGTGTCTC TGTCAAGACC CTGCATCACT ATGACAAGAT AGGACTCTTG GTCCCCTTAA	240
AGTCGGAAAA CGGCTATCGA ACCTACAGTC AAGAGGATTT GGAACGCCCT CAGGTCATTC	300
TTTACTACAA ATATCTAGGC TTTTCTTTAG AGAAAATAGC AGAGCTGTTA AAGGAAGAAA	360
GGACAGATTT ATTGCCCCAT TTGACTAGGC AGTTGGACTA TCTAACTCGC GAAAGGCAAC	420
ATCTGGATAC CTTGATTTCC ACCTTGCAA AAATATTCA AGAACAAAA GGAGAAAGAA	480
AAATGACCAT TGAGGAAAAA TTCACGGGAT TTAGCTATCA AGACAATCAA AAATACCACC	540
AAGAAGCGGT AGAGAAATAT GGTCAAGAAG TCATGGGACA AGCGCTCGAA CGCCAAAAAG	600
GTCACGAAGA CGAGGCTACG GCCGCCTTTA ACCAAGTCTT TCAAACCTTG GCACAAAATC	660
TTCAAGTTGG TTTACCTGCA ACAGCAACCG AAAACCAGGA GCAAGCAGCC AAGCTCTTGC	720
AAGCCATTCG CACTTATGGA TTTGACTGCT CTATTGAGGT ATTCCGGTCAT ATCGGTAAAG	780
GTTACGTCTA CAACCCAGAG TTTAAGGAAA ACATTGACAA GTTTGGTTCT GAAACAGCCC	840
AGTACACGTC AGATGCCATT GCGGTTTACG TTCAGACAAA TGCAGAATAA ATAGGCTAGG	900
AATTCCTTAG CCTATTTTTT ACTTCAAATC ATAAAGCCAG TCGTCACCGT TTTGTAGTA	960
AAAGAATTCA CTGAGATCTT CTTCTAGAAA CACACGAAGC ATATCAGACA TATCATCGGT	1020
TGCAAGTTTT AGATGAGAAA GATTTTCAA GTCCCTCCAC CAAACTTTCC CTTCGTCTGA	1080
AGACTGGAGT TCACCAAGTAA AGTGTTCTGT CTTGTAAAA AGGACGACAT AACGATAATC	1140

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CTTGTCGTCA TACCAGTTT	TGATACCACA GAGTTGGGGT	TTGGAAATGA TCAGACCAGT	1200
TTCTTCTTTC ACTTCACGAA	TGACAGCATC GACAAAGGAT	TCGCCACGTT CAACATGACC	1260
ACCAGGAAAA GTAATGCCAG	ACCAGTCGGG ATTAAGTCGG	TCTTGGACCA GGACCTTATC	1320
TCCGTTTTTA ATCATACACA	TGTTAACAAA TTCGACTGCC	TCTCTTCTGT TCATTCTTCA	1380
CAACCTTTAA TCTTTAATCA	TAATGCAGAC TTCCCGCCAC	CCAGCCGGTA CAGAGGGCAG	1440
AAGTGATGTT AAAGCCACCC	GTGTGGGCAT TGATATCCAT	AACTTCGCCT GCAAAGTGGA	1500
GGCCAGGTAC CAGCTTACTT	TCAAGGGTTT TAGGATTGAT	TTCTTGAGA CTGACTCCAC	1560
CCTTGGTAAC AAAGGACTTT	GCAAGGGACA TTTTTCAGT	TACAGGAATT TTAAGTTCTT	1620
TAATGGACTG GACAAGTTGT	TCTCGTTCCT TTTCAAGTCA	TTGTTTGACT TTTTCAGGAT	1680
ATCCTTGATC AAAAAATTCG	GCCAAGCGTT CTGGTAACAA	GGTTTTTAAA GCGTTTTTCA	1740
AGGATTTTTC CCGATTTTCT	TCTAGAAATG TAACCAAGTC	CTTCTCAGAA AGTTGAGGCA	1800
AAACATCGAG TGAGAGAAC	TCCCCACCTT TGACAAAGCT	AGACATGCGT AGGGCAGCAG	1860
GACCTGACAA ACCAAAGTGG	GTAAGAGTA AATCATGAGT	GATGACATGC TTACCATAAC	1920
TTAGGGTCAC ATCGTCCAGA	GAAATACCTT GTAAGGCTTT	ATGTGGAAAA TCTGTTAATA	1980
AAGGACTTTC AGCAGCCTCA	AGATCGGTGA TGGTATGCTT	AAAATGGCGA GCAATCTCGT	2040
GACCAAAACC AGTCGAACCA	GTGGAAGGAT AAGACTTACC	ACCTGTTGTG ACAATGAGTT	2100
TCTCACAAGT GAAGGTTTGA	TCCGCTGACT TAAGGACAAA	CTGGTCATCT ACTTTTTTAA	2160
CAGAAACGAT TTCTATTGTA	GTAGCAACTT GACCACCTAG	TTCCGGTGATT TTCTTTTCCA	2220
AAGCTTCGAT AATAGTCCGA	GACTTGTAC TGGCTGGAAA	GACGCGTCCG TGGTCTTCGA	2280
CCTTAAGTTT AACACCATT	TCTGTAAAAA AGTTGATGAT	GTCATGATTA TCGAACTGGG	2340
AGAAAACACT GTAAAGAAA	CGTCCGTTTC CAGGAATTCC	AGCTAGCAGG TTGTCTAAGC	2400
TACCATTGTT GGTACATTG	CAACGTCCCC CACCAGTCCC	AGCTAATTTT TTTCCAAGTT	2460
TCCGATTTTT TTGATGAGG	AGGGTTTCT GTCCATAAAA	GCTACTGGAA ATCGTAGCCA	2520
TCATACCAGC AGGTCCCCA	CCGATGACAA TAGTATCAA	ATGTTTCATA GCTCTATTGT	2580
ACCACAAAAA AACAAGAGAT	GATGGTCACC TCTGTCAAG	AATGCAATTA ATCAATTTC	2640
TAGCCCATCA GCAAACCGCC	CTCTCTGCA TAGAACTGC	AGAGACCAGA GGTGGGTAGA	2700
ATTTTAATAT CCGCTTGTGG	GAAGGTTTCA CGGATTCGCT	CTGAGAGCTG TTGACAACAT	2760
TTTTCGTAT TGCGTTGGC	CATGACAATA CGGCCACCAG	CATATCCAGC TTTTACTAAC	2820
TCATCATAGG CAGCTTGAAC	TGATTTCTTT GATCCCTTG	CTTTTGTAG CAATTCGAGA	2880

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GTCCCAGTTT CACTAGCTTT TCCGACCATA CGAATGTTGA GAAGGCCAAC GACCGTACCG	2940
ATAAGCTTGC TCAAACGGCC GTTCTTCACC AAGTTATCGA CTTTGGCTAG GACAAAGAGC	3000
AACCTAGTTT TTTCTTGATA GCGGGTGATA GCTTCAACCA CTTCTTCAA AGACAAGCCC	3060
TGGTCAATCA AGTCATTCAA TTTTCTACG AGTAGGTCAA CTTCAACCACC AGCAGATAAA	3120
CTATCAATCA CATGAATCTT AGTGTGAGGA TGGTCTTCCA GATAAATATT CTTTGCTAGT	3180
TGAGCACTAT TGTGACTGCC AGAAAGGGTA CCTGTGATGG TTACTAGGAA AATGTTTTTG	3240
GCACCTTCAA ATGCTCGCAA ATAGTCATCT GGGCTTGGAC AAGCCGATTT TGAAGCTTCT	3300
GCAGTTGCAT ACATGGTTTC CATCATTTGG TCAATATCGA GACTGGCGTC ATCAACAAAG	3360
ACCTGATCAG CTACTTGAAT GGTAAAGGGG ACACTTACAA AGGTGTGTGT AATAGCTGGT	3420
GTGGCAGTT GACGATAATC ACAACCAGAG TCAGCAATAA TCTTCCAAGT CATAGAAATT	3480
CTCCATCTTT GTCAGGAACG AT	3502

## (2) INFORMATION FOR SEQ ID NO: 134:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 12665 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 134:

CGATTGATTT TTTTAAAGCG TTCGATAGAG AATGAGAAAC GAATCCTTAG CAATGGCGGG	60
AAAGAATTTG GAGTTGAGAA TACAAAACGA TTAACATATGG CTCATATTGT TTTTATCTC	120
TCTTGCTTGG TTGAGGCAAT GGTGCACAAG ACAATTTTGG ATGGCATGGG CATGGTTGGT	180
TTAGTCTTGC TTATTTTTTC TATGCTGATG TTGATGTTGG TGATTCACTT GTTGGGAGAT	240
ATTTGGACAG TGAAGCTTAT GCTTGTCAAT AATCACAAAT ATGTAGATCA TATCTTGTTC	300
AGGACAGTAA AACACCTTAA TTAATTTTTC AATATTCCTC CTGAGTTGAT TGGCTTGACC	360
TTGTTGAGTC ATGCTTATGT GACTTTTGTT TTAGTTTTTC CAGTTTATGC AGTTATTTTG	420
TATCGACGAA TAGCTGAAGA GGAAGGCTA TTACATGAAG TTATAATCCC AAATGGAAGC	480
ATAAAGAGAT AAATACAAAA TTCGATTAT ATACAGTTCA TATTGAAGTG ATATAGTAAG	540
GTAAAGAAA AAATATAGAA GGAAATAAAC ATGTTTGCAT CAAAAGCGA AAGAAAAGTA	600
CATTATTCAA TTCGTAAATT TAGTGTGGA GTAGCTAGTG TAGTTGTTGC CAGTCTTGT	660
ATGGGAAGTG TGGTTCATGC GACAGAGAAC GAGGGAGCTA CCCAAGTACC CACTTCTTCT	720
AATAGGGCAA ATGAAAGTCA GGCAGAACA GGAGAACAAC CTAAAAAAT CGATTTCAGAA	780

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CGAGATAAGG CAAGGAAAGA GGTCTGAGGAA TATGTAAAAA AAATAGTGGG TGAGAGCTAT	840
GCAAAATCAA CTAAAAAGCG ACATACAATT ACTGTAGCTC TAGTTAACGA GTTGAACAAC	900
ATTAAGAACG AGTATTTGAA TAAAATAGTT GAATCAACCT CAGAAAGCCA ACTACAGATA	960
CTGATGATGG AGAGTCGATC AAAAGTAGAT GAAGCTGTGT CTAAGTTTGA AAAGGACTCA	1020
TCTTCTTCGT CAAGTTCAGA CTCTTCCACT AAACCGGAAG CTTTCAGATAC AGCGAAGCCA	1080
AACAAGCCGA CAGAACCAGG AGAAAAGGTA GCAGAAGCTA AGAAGAAGGT TGAAGAAGCT	1140
GAGAAAAAAG CCAAGGATCA AAAAGAAGAA GATCGTCGTA ACTACCCAAC CATTAATTAC	1200
AAAACGCTTG AACTTGAAAT TGCTGAGTCC GATGTGGAAG TTAATAAAGC GGAGCTTGAA	1260
CTAGTAAAAG TGAAAGCTAA CGAACCTCGA GACGAGCAAA AAATTAAGCA AGCAGAAGCG	1320
GAAGTTGAGA GTAAACAAGC TGAGGCTACA AGGTTAAAAA AAATCAAGAC AGATCGTGAA	1380
GAAGCAGAAG AAGAAGCTAA ACGAAGAGCA GATGCTAAAG AGCAAGGTAA ACCAAAGGGG	1440
CGGGCAAAAC GAGGAGTTCC TGGAGAGCTA GCAACACCTG ATAAAAAGA AAATGATGCG	1500
AAGTCTTCAG ATTCTAGCGT AGGTGAAGAA ACTCTTCCAA GCCCATCCCT GAAACCAGAA	1560
AAAAAGGTAG CAGAAGCTGA GAAGAAGGTT GAAGAAGCTA AGAAAAAGC CGAGGATCAA	1620
AAAGAAGAAG ATCGCCGTAA CTACCCAACC AATACTTACA AAACGCTTGA ACTTGAAATT	1680
GCTGAGTCCG ATGTGGAAGT TAAAAAGCG GAGCTTGAAC TAGTAAAGA GGAAGCTAAG	1740
GAACCTCGAA ACGAGGAAAA AGTTAAGCAA GCAAAAGCGG AAGTTGAGAG TAAAAAGCT	1800
GAGGCTACAA GGTTAGAAAA AATCAAGACA GATCGTAAAA AAGCAGAAGA AGAAGCTAAA	1860
CGAAAAGCAG CAGAAGAAGA TAAAGTTAAA GAAAAACCAG CTGAACAACC ACAACCAGCG	1920
CCGGCTCCAA AAGCAGAAAA ACCAGCTCCA GCTCCAAAAC CAGAGAATCC AGCTGAACAA	1980
CCAAAAGCAG AAAAACCAGC TGATCAACAA GCTGAAGAAG ACTATGCTCG TAGATCAGAA	2040
GAAGAATATA ATCGCTTGAC TCAACAGCAA CCGCCAAAAA CTGAAAAACC AGCACAACCA	2100
TCTACTCCAA AAACAGGCTG GAAACAAGAA AACGGTATGT GGTAATTCTA CAATACTGAT	2160
GGTTCAATGG CGACAGGATG GCTCCAAAAC AATGGCTCAT GGTAATACCT CAACAGCAAT	2220
GGCGCTATGG CGACAGGATG GCTCCAAAAC AATGGTTCAT GGTAATACCT AAACGCTAAT	2280
GGTTCAATGG CAACAGGATG GCTCCAAAAC AATGGTTCAT GGTAATACCT AAACGCTAAT	2340
GGTTCAATGG CGACAGGATG GCTCCAATAC AATGGCTCAT GGTAATACCT AAACGCTAAT	2400
GGTTCAATGG CGACAGGATG GCTCCAATAC AATGGCTCAT GGTAATACCT AAACGCTAAT	2460
GGTGATATGG CGACAGGTTG GGTGAAAGAT GGAGATACCT GGTAATACCT TGAAGCATCA	2520

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GGTGCTATGA	AAGCAAGCCA	ATGGTTCAAA	GTATCAGATA	AATGGTACTA	TGTCAATGGC	2580
TCAGGTGCCC	TTGCAGTCAA	CACAACGTGA	GATGGCTATG	GAGTCAATGC	CAATGGTGAA	2640
TGGGTAAACT	AAACCTAATA	TAACTAGTTA	ATACTGACTT	CCTGTAAGAA	CTCTTTAAAG	2700
TATTCCCTAC	AAATACCATA	TCCTTTCAGT	AGATAATATA	CCCTTGTAGG	AAGTTTAGAT	2760
TAAAAAATAA	CTCTGTAATC	TCTAGCCGGA	TTTATAGCGC	TAGAGACTAC	GGAGTTT'TTT	2820
TGATGAGGAA	AGAATGGCGG	CATTCAAGAG	GCTCTTTAAG	AGAGTTACGG	GTTT'TAAACT	2880
ATTAAGCCTT	CTCCAATTGC	AAGAGGGTTT	CAATCTCTGC	CAGGGTGCTG	GCTTGCGAAA	2940
TGGCTCCACG	GAGTTTGGCA	GCGCCAGATG	TTCCACGGAG	ATAGTGAGGA	GCGAGACCGC	3000
GGAATTCACG	AACTGCGACG	TTTCTCTCCT	TGAGGTTAAT	CAATCGTTTC	AAGTGTTTCGT	3060
AGGCGATCTT	CATCTTGTCT	TCAAAGGTCA	AATCAGGTAG	GATTTCTCCT	GTTTCAAAGT	3120
AATGGTTGAT	TTGGTTGAAG	AGGTAAGGAT	TTCCCATGGC	AGCTCGGCCA	ATCATGACTG	3180
CGTCAGCACC	AACTTCTTCG	ATGCGTTGCT	TGGCTTCTTG	GACAGTACGG	ATATCACCGT	3240
TGGCGATGAA	TGGAATCTTG	GTTAGAGCTT	GGCAACCTT	GTAAAGGGTC	TCAAGGTCTG	3300
CCTGGCCAGT	ATACATTTGT	TCACGGGTAC	GGCCATGCAT	GGCGAGGGCA	GAAACACCTG	3360
CAGCTTCAGC	AGCGAGAGCA	TTTTCTACTG	CAAGAGATGG	GTCCGCCCCAG	CCGGTACGCA	3420
TTTTGACAGT	AAGTGGGATA	TCAAGGACAG	ACTGGACCTT	GTGATGATG	GAGTAAATCT	3480
TGTCTGGATC	CTTGAGCCAC	ATAGCACCAG	CTTCGTTCCT	CACGATTTTG	TTGACAGGGC	3540
AGCCCATGTT	GATATCGACG	ATATCGGTCT	TGGTGT'TTC	TTGGATGAAT	TCTGCTGCGC	3600
GTGCTAGGCT	GTCTTCATCG	CTACCAAAAA	GTTGGATAGA	GACAGGGTTT	TCGCCCTCAT	3660
CGATATGAAG	CATGTGCAGG	GTTTTTTCGT	TGTTGTATTG	GATTCCCTTG	TCAGAGACCA	3720
TTTCCATTAC	AACGAGTCCA	GCTCCGAGCT	CCTTTGCGAT	AGTACGAAAG	GCTGAGTTGG	3780
TCACGCCAGC	CATAGGCGCT	AAAACGGTAC	GATTGGGAAT	CTCAATATTG	CCAATCATAA	3840
AAGGTGTATT	AAGATTTGTC	ACGAATGAGT	TCCTCCAGGT	CCTTTTCATC	AAAGTTGTAA	3900
GTAGTTTGGC	AGAATTGACA	AGTGATTCTT	GCCCCGTGGT	CTTCCTCTTT	CATTTCTCTG	3960
AAGTCTGAGC	TTGGAAGGCT	GGCAAGAGCG	TTCATAAAGC	GTTCATGGCT	ACAGTCACAT	4020
TGGAAACGGA	TTTCTTCTTC	AGAAAGACGC	TTGTAGGCTT	CGTCCCCGTA	GATAGCCTTG	4080
AGGAGGGCTT	CGATATGGTC	GTCGCTTTCG	AGAAGAGTAG	AGATAGCTGG	CATTTCTTGG	4140
ATGCGTTTTT	CAAAGCGAGC	AATCTCTTCT	TTCTTGCGTC	CTGGCAAGAC	TTGAACTAGG	4200
AAACCACCTG	CAACCTTGAC	CTTGTCTTCC	TCGTCCAAAA	GGACATTGAG	GCCGACCGCT	4260
GAAGGCGTTT	GTTGGCTTTC	AGTAAGGTAA	AAGGCAAGGT	CTTCACCGAT	TTCTCCAGAG	4320

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ATGAGGGGAG TTATAGAGTT GTAAGGATTT CCAGTACCGT AGTCTGTGAT AACGAGGAAT	4380
TGACCATTTT CAACAAAAGG TCCGACTAGG ACTTCACCAG TCGCAGTCTT TTTGATGTCA	4440
ACACCAGGAT TTTGAACATA GCCTTTGACG TTCCCCTTGG TATCAGCGAC GGTGATAATA	4500
GCACCTAGAG AGCTAGATCC CAACACCTTA ACTGTAAGTT TGGTATTTCC TTTTTCATTG	4560
GCTGCGAGAA TCTGGCTAGC GATAAGAGTT CGACCAAGCG CTACAGTTGA GCTAGCTTGG	4620
GTTTGATGTT TTTCTTGAGC AGTGCGGACG GTTTCAGTGC TATCAAGGAC AAAAGCACGA	4680
AAGGcTCCGC TTTCTGATAT AGTTTTAATA ATTTTATCCA TAGCTACTAT TTTAGCATAA	4740
AAATGCCCAA AGGGGGAGCC GTGTGTTTAC TGATTTTCAG GATAATGGAC CAGGAAATCA	4800
GCATGAAAAA AAAAAGAGAA ACAGATTATT TTAGCATTTG TCAGATTTAT GCTATGCTTA	4860
AGGTAGAAAA TGAAGGGAT AACAAATGTA TTAGGAGAT TTGATGGAGA AAGCCGAGTG	4920
TGGTCAATTT TCAATACTTT CCTTCTATT ACAAGAGTCT CAGACGACCG TCAAGGCTGT	4980
AATGGAAGAA ACAGGATTTT CAAAAGCAAC CCTAACCAA TATGTCACCC TGCTCAATGA	5040
CAAGGCTTTG GATAGTGGCT TAGAGCTGGC TATTCACTCA GAAGATGAAA ATCTGCGTCT	5100
GTCTATCGGT GCAGCTACCA AGGGGAGAGA TATTCGGAGC TTGTTTTTGG AGAGTGCTGT	5160
TAAATACCAG ATTTTGTTT ATCTTCTCTA CCACCAACAG TTTTGTAGCC ATCAGCTGGC	5220
TCAAGAATTG GTGATTAGCG AGGCTACGCT TGGTCGTCAC TTGGCTGGTT TAAATCAGAT	5280
TTTGTGAGAA TTTGATTTAT CCATCCAAAA TGGCCGTTGG CGAGGTCCAG AGCATCAGAT	5340
TCACTATTTT TATTTCTGTC TTTTCCGAAA GGTCTGGTCG AGTCAGGAAT GGGAAGGTCA	5400
CATGCAGAAA CCAGAGAGAA AACAGGAGAT TGCCAATTTA GAGGAAATCT GCGGTGCAAG	5460
TTTGTCTGCG GGGCAGAAAT TGGACTTGGT TCTCTGGGCT CACATCAGTC AACAACTGCT	5520
TCGGGTCAAT GCTTGTGAGT TTCAAGTCAT AGAAGAGAAA ATGCGAGGGT ATTTTGACAA	5580
TATCTTTTAT CTTCGTTTGC TGAGAAAGGT TCCGTCCTTT TTTGCTGGGC AACATATTCC	5640
ACTAGGAGTT GAGGATGGTG AGATGATGAT ATTCTTCTCT TTTCTCCTAT CTCATCGCAT	5700
TCTTCCTCTT CATACTATGG AGTATATTCT TGGTTTGGGA GGGCAGTTGG CAGATTTACT	5760
GACGCAATTG ATTCAAGAAA TGAAGAAGGA GGAACATATG GGGGATTATA CAGAGGACCA	5820
TGTCACCTAT GAACTCAGTC AGCTTTGTGC TCAAGTCTAT CTCTATAAGG GCTATATTTT	5880
ACAGGATCGC TACAAGTACC AGTTAGAGAA TCGTCATCCA TATTTACTGA TGGACATGA	5940
TTTTAAAGAG ACAGCAGAGG AGATTTTCA TGCTCTACCT GCTTTTCAAC AGGGGACAGA	6000
TTTAGATAAG AAGATTCTCT GGGAATGGCT CCAGTTAATC GAATATATGG CTGAAAACGG	6060

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TGGCCAGCAT	ATGCGGATTG	GTCTGGATTT	GACATCTGGT	TTTCTTGTCT	TTTCAAGGAT	6120
GGCAGCCATT	TTGAAACGGT	ATTTGGAATA	CAATCGTTTT	ATTACCATTG	AAGCTTATGA	6180
CCCTAGTCGG	CATTATGATT	TGCTGGTTAC	CAATAACCCG	ATTCATAAGA	AGGAACAGAC	6240
ACCAGTCTAT	TATTTAAAAA	ATGACTTGGA	TATGGAGGAT	TTGGTAGCGA	TCGCCAGTT	6300
ATTATTCACT	TAAAAGGCTT	GGTTAATCCA	GGTCTTTTTT	GTGAAATCA	CACAATCTCC	6360
TCACATTTTT	TTAAAAATTA	AAAAAAGTTG	ATAACAAGA	AAGCGCTTTA	TTTTGTATAC	6420
TAGTAAGTGT	AAAGAGGAAA	CACCTCAAGA	TCTTTATCAG	GAGGACAGTA	CATGTCACAA	6480
GAAAAATACA	TCATGGCCAT	TGACCAGGGA	ACTACAAGTT	CTCGTGCCAT	CATTTTCAAC	6540
AAAAAAGGGG	AAAAGGTTAG	CTCGAGTCAA	AAAGAGTTTA	CCCAGATTTT	CCCTCAGGCA	6600
GGTTGGGTTG	AGCACAAATGC	CAATGAAATT	TGGAACCTCTG	TTCAGTCAGT	TATTGCGGGT	6660
GCTTTCATCG	AAAGTGGTGT	CAAGCCAAAT	CAAATCGAGG	CAATCGGGAT	TACCAACCAA	6720
CGTGAAACAA	CGGTGTCTG	GGATAAGAAA	ACAGGACTTC	CTATCTACAA	TGCTATCGTT	6780
TGGCAGTCAC	GCCAGACAGC	ACCTTTGGCT	GAGCAACTAA	AAAGCCAAGG	TTATGTGGAA	6840
AAATTCCATG	AAAAGACTGG	TTTGATTATT	GATGCTTACT	TCTCTGCTAC	CAAGGTCGT	6900
TGGATTTTGG	ATCATGTAGA	AGGTGCTCAA	GAGCGAGCAG	AAAAAGGGGA	ATTGCTCTTT	6960
GGTACTATCG	ATACTTGGTT	GGTTTGAAA	TTGACTGACG	GTGCGGCTCA	CGTGACTGAC	7020
TACTCAAATG	CAGCTCGTAC	CATGCTTTAT	AACATTAAAG	AACTCAAATG	GGATGATGAG	7080
ATTTTGAAAA	TCCTTAACAT	TCCGAAGgCT	ATACTTCCAG	AAGTTCGTTC	TAACCCGAA	7140
ATCTACGGCA	AGACAGCTCC	ATTCCATTTT	TACGGTGGAG	AGGTGCCAAT	CTCAGGTATG	7200
GCTGGGGACC	AACAAGCAGC	CCTCTTTGGA	CAGTTGGCTT	TTGAGCCAGG	TATGGTTAAG	7260
AATACTTATG	GAACAGGCTC	TTTCATCATC	ATGAATACTG	GGGAAGAGAT	GCAGTTGTCT	7320
GAAAAACAAC	TCTTGACAAC	CATTGGTTAC	GGAATCAACG	GTAAGGTTTA	TTATGCCTTG	7380
GAAGGTTCTA	TCTTCATCGC	AGGAAGTGCT	ATTCAGTGGC	TTCGTGACGG	TCTTCGCATG	7440
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TATGTCGTTC	CAGCCTTTAC	AGGTCTAGGC	GCTCCATACT	GGAACCAAAA	TGCTCGTGGT	7560
TCCGTCTTTG	GTTTGACTCG	TGGAACAAGC	AAAGAAGACT	TTATCAAGGC	GACTTTGCAA	7620
TCTATTGCTT	ATCAAGTGCG	TGATATCATC	GACACCATGC	AAGTGGATAC	TCAGACCGCC	7680
ATTCAAGTAC	TGAAGGTGGA	TGGTGGTGCA	GCCATGAACA	ACTTCCTCAT	GCAGTTCCAG	7740
GCGGATATTT	TAGGCATTGA	CATTGCACGT	GCTAAAAACC	TGGAAACAAC	AGCTCTAGGA	7800
GCGGCCTTCC	TAGCAGGTTT	GTCAGTAGGG	TACTGGAAAG	ACTTGACGCA	GTTGAAACTC	7860



TTGAACGAGA CAGGAGAACT CTTTGAGCCA TCTATGAACG AATCTCGCAA GGAACAAC TC	7920
TACAAGGGCT GGAAGAAGGC TGTGAAAGCA ACTCAAGTCT TTGCGGAAGT AGACGACTAA	7980
TACTGGCAGA ATAAAGCGAT TTATTTAGAA AGTGTGTAAT TATGGAATTT TCAAAGAAAA	8040
CACGTGAATT GTCAATTAAA AAAATGCAGG AACGTACCCT GGACCTCTTG ATTATCGGTG	8100
GAGGAATCAC AGGAGCTGGT GTAGCCTTGC AGGCGGCAGC TAGCGGTCTT GAGACTGGTT	8160
TGATTGAAAT GCAAGACTTT GCAGAAGGAA CATCTAGTCG TTCAACAAAA TTGGTTCACG	8220
GAGGACTTCG TTACCTCAA CAATTTGACG TAGAAGTGGT CTCAGATACG GTTCTGAAC	8280
GTGCAAGTGGT TCAACAAATC GCTCCACACA TTCCAAATC AGATCCAATG CTCTTACCAG	8340
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ACGACCTCTT GGCAGGTGTT AGCAACACAC CAGCTGCGAA CAAGGTTTGT AGCAAGGATC	8460
AAGTCTTGGA ACGCCAGCCA AACTTGAAGA AGGAAGGCTT GGTAGGAGGT GGAGTGTATC	8520
TTGACTTCCG TAACAACGAT GCGCGTCTCG TGATTGAAAA CATCAAACGT GCCAACCAAG	8580
ACGGTGCCCT CATTGCCAAC CACGTGAAGG CAGAAGGCTT CCTCTTTGAC GAAAGTGGCA	8640
AGATTACAGG TGTGTAGCT CGTGATCTCT TGACAGACCA AGTGTTTGAA ATCAAGGCCC	8700
GTCTGGTTAT TAATACAACA GGTCTTGGA GTGATAAAGT ACGTAATTTG TCTAATAAGG	8760
GAACGCAATT CTCACAAATG CGCCCAACTA AGGGAGTTCA CTTGGTAGTA GATTCAAGCA	8820
AAATCAAGGT TTCACAGCCA GTTTACTTCG ACACAGGTTT GGGTGACGGT CGTATGGTCT	8880
TTGTTCTCCC ACGTGAAGAC AAGACTTACT TTGGTACAAC TGATACAGAC TACACAGGTG	8940
ATTTGAGCA TCCAAAAGTA ACTCAAGAAG ATGTAGATTA TCTACTTGGC ATGTGCAACA	9000
ACCCTTCCC AGAATCCAAC ATCACCATTG ATGATATCGA AAGCAGCTGG GCAGGTCTTC	9060
GTCCATTGAT TGCAGGGAAC AGTGCCTCTG ACTATAATGG TGGAAATAAC GTTACCATCA	9120
GTGATGAAAG CTTTGACAAC TTGATTGCGA CTGTTGAATC TTATCTCTCC AAAGAAAAAA	9180
CACGTGAAGA TGTGTAGTCT GCTGTCAGCA AGCTTGAAAG TAGCACATCT GAGAAACATT	9240
TGGATCCATC TGCAGTTTCT CGTGGGTCTA GCTTGGACCG TGATGACAAT GGTCTCTTGA	9300
CTCTTGCTGG TGGTAAAAATC ACAGACTACC GTAAGATGGC TGAAGGAGCT ATGGAGCGCG	9360
TGGTTGACAT CCTCAAAGCA GAATTTGACC GTAGCTTTAA ATTGATCAAT TCTAAAAC TT	9420
ACCCTGTTC AGGTGGAGAA TTGAACCCAG CAAATGTGGA TTCAGAAATC GAAGCCTTTG	9480
CGCAACTTGG AGTATCACGT GGTGTTGATA GCAAGGAAGC TCACTATCTG GCAAATCTTT	9540
ACGGTTCAAA TGCACCGAAA GTCTTTGCAC TTGCTCACAG CTTGGAACAA GCGCCAGGAC	9600

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TCAGCTTGGC	AGATACTTTG	TCCCTTCACT	ATGCAATGCG	CAATGAGTTG	ACTCTTAGCC	9660
CAGTTGACTT	CCTTCTTCGT	CGTACCAATC	ACATGCTCTT	TATGCGTGAT	AGCTTGATA	9720
GTATCGTTGA	GCCAATTTTG	GATGAAATGG	GACGATTCTA	TGACTGGACA	GAAGAAGAAA	9780
AAGCAACTTA	CCGTGCTGAT	GTGGAAGCAG	CTCTCGCTAA	CAACGATTTA	GCAGAAATTA	9840
AAAATTAAGA	AAAAATAAAA	GAGGTGGAGG	GCAGCATTC	TTGTCGCCCG	TCCCTTCTTT	9900
TTAATGGAGA	CAGAAAGATG	ATGAATGAAT	TATTTGGAGA	ATTTCTAGGG	ACTTTAATCC	9960
TGATTCTTCT	AGGAAATGGT	GTTGTTGCAG	GTGTGGTTCT	TCCTAAAACC	AAGAGCAATA	10020
GCTCAGGTTG	GATTGTGATT	ACTATGGGTT	GGGGGATTGC	AGTTGCGGTT	GCAGTCTTTG	10080
TATCTGGCAA	GCTCAGTCCA	GCTTATTTAA	ACCCAGCTGT	GACCATCGGT	GTGGCCTTAA	10140
AAGGTGGTTT	GCCTTGGGCT	TCCGTTTTGC	CTTATATCTT	AGCCCAGTTC	GCAGGGGCCA	10200
TGCTGGGTCA	GATTTTGGTT	TGGTTGCAAT	TCAAACCTCA	CTATGAGGCA	GAAGAAAATG	10260
CAGGCAATAT	CCTGGCAACC	TTCAGTACTG	GACCAGCCAT	CAAGGATACT	GTATCAAAC	10320
TGATTAGCGA	AATCCTTGGA	ACTTTTGTTT	TGGTGTGAC	AATCTTTGCT	TTGGGTCTTT	10380
ACGACTTTCA	GGCAGGTATC	GGAACCTTTG	CAGTGGGAAC	TTTGATTGTC	GGTATCGGTC	10440
TATCACTAGG	TGGGACAACA	GGTTATGCCT	TGAACCCAGC	TCGTGACCTT	GGACCTCGTA	10500
TCATGCACAG	CATCTTGCCA	ATTCCAAACA	AGGGAGACGG	AGACTGGTCT	TACGCTTGGA	10560
TTCTGTGTG	AGGCCCTGTT	ATCGGAGCAG	CCTTGGCAGT	GCTTGTATTC	TCACTTTTCT	10620
AGTTTATACT	CTTCGAAAAT	CAAATTCAAA	CCACGTCAGC	GTGCGCTTAC	CGTACTCAAG	10680
TACAGCTTGC	GGCTAGCTTC	CTAGTTTGCT	CTTTGATTTT	CATTGAGTAT	TAGAAAACAA	10740
TTATGTTGAT	AGAGCTTGGG	CAAGAGCCCA	ATTTAGAGCA	AAAATGAAGT	AAATCTTCTC	10800
ATAATAAAAC	GCATCATATC	AAGCACGAAA	ATTCCACGAG	GTCAACTACA	GTCAGAAAGC	10860
TGAACAACAA	GCCAAAACGC	CCAAAAAAGG	CGGCAAAAAG	CAAGCACCTG	CAAGCAACGT	10920
GCCGAAATGG	TCAAATCCTG	ATTATGTCAA	CGAATTAGAC	CCAAAAATCG	TTGATATGCT	10980
AGTAGAATTT	CACAAGTCAC	AAGGCACTTT	GGAAACTCCC	GAGGCGCAAG	CAGAAATCGC	11040
CCAAAAACGT	GAAGAAATCG	AGCAAAGGAG	AGCTGAGCTT	GAGGGTAAAA	AACAAGAGCT	11100
TTTGAACCGC	TTGAACAAAT	AGAGTTTCGC	AAGTATTATG	CTTACAAATT	ACTTGAGCAA	11160
TTAACTAAAA	TATAAACCCCT	GCCTTTATAT	CTAGGCAGGG	TTTATATTTT	AGAAATTCAC	11220
GTAGGTTGTT	ACGGTTTTTA	CATACCCAGT	ATAGTTTGAG	TTTCTATAGT	ATTCAGTGAT	11280
AAACTTCCAT	TTTCTTTGAG	CAACATGGAT	ATAAGTACTT	GTTATGTAGT	ATGGATATGG	11340
GCTTTGTGAA	TCCAAGTAAG	ACTGATAAGC	TGTATACCA	AAATATGCTC	CACCAATTAT	11400

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TGCACCCCAT GGACCCCCCA ATAAAGCACC TATCCTACCA ATCATATAAC TGATTCCAGC 11460  
 ACCAGTCATG AAGTTAGCGA ATGTGTTAGC TTGTTTATTC CCATGTATTG TGTGACGTA 11520  
 ATTCCAAACA TTAGGATCGT ATGATCTAAA AGATATATTT AGGTCGATTT CATTCCTTTTG 11580  
 ATAAGCCATA TAAAATGCCC CATTGATATA GACGCCGTCA GCACGTCGTT CAATAGTGTC 11640  
 TACACTTCCA TCTGGATTGA CAACCTCAAG AACTTCATCG CTTAAAATAT TTACTTGCGT 11700  
 ATCTCCGAAC CGCACTGATG AGCCATTCTC AACTGAGCC TCACCAGATA CAACTTTAGA 11760  
 GTTTGCCGAT AAGCTATCAT CAGCAAAAAC AAACAAGCGA CGGGGAAATG CTAGACATAC 11820  
 AGAAAACAGA CATAACTAGC AAACACATGC ATTTAAACAT CTTAGACATA ACGGAAACTC 11880  
 CTTTGTATTT TTGATTTTTC TCAACTTTTA TTATACAATA AAACCAAATA AAAAGAAAGC 11940  
 GGTAACAATA TGCTTAATGC GAAAATTTTT TATATATTTT TATGTTTGAT CGTTATCGAA 12000  
 ACTACAGGCT TGTGTGTGTT GAAAAGAGGT CTCGAAATGG GTTATTTAGA CACAGAAGCT 12060  
 ATTATCCTCG CAGTTTTTTC ATTTGCTTTT TACAACCTAT GTTCATTTCG TTGGGTCTGC 12120  
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 TTTATATTAG CAAAACGACG ATTTAAATCG TCGTTTTTTT GTAGTACGAC GGGCATGTGC 12240  
 TATATCTGAG GTGTAAGTCC TCAGCCTGAC TATCGTGAGG TAGCAGGGAG AGGAAGGGAT 12300  
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 GGCTTCAAAC TCTAAAGTCC AAAAAGGTAG TCGTAACCTA TATGTGTAAA TCACGAGAGT 12420  
 AATTGAATTC GGACTAAGGT TTGTGTGAAA AAGATAAATC TTTCTAGAGT CTAAAGACTC 12480  
 TGCGTCAGAT TTCCTATTTT CACTGTAACC TTTTAACGTC CTCATATCTT GTATAACGA 12540  
 GGAAAGATGT ACGACTTATC CCGTGAGGTT TCATGAGCGT GAAAGCGTAG TAACAACGAA 12600  
 TCATGAGAAG TCAGCCGAGC CCATAGTAGT GAGGAAACTT CCGTAATGGA AGTGGAGCGA 12660  
 AGGGG 12665

(2) INFORMATION FOR SEQ ID NO: 135:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 5305 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 135:

CGCTAATCAC TACAATCATT TTATTGTACT TTTTCACTCT CAAGAAAAGC AAGAAGTATT

60

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CATTTTAGTT	TCATTTAGTA	TTATTTTGCA	TACCTAAAAAT	ACAGTAAAAA	ATCAGTCATC	120
TTGGTATGCT	CCTGCTTTCA	CTATTCAACA	CGTTTTTGAC	TTATACTAGG	CTCATTTCCA	180
AAAGCATTAT	ATAATAGTGA	TATGAAACCA	ACTAAACTAA	ACAAGAAATA	TAAGCAATAA	240
AAATTCGTTT	AAAAGATCTT	ACTAAAGCTA	ATACTAAATA	AAAATAAAAG	AGTAAACTAG	300
GAAGTTTATT	TCAAACAACC	TAAAATACTG	ATTTTCGGCT	GAAGATAATA	CTGGAGTGCA	360
AATTAATGGG	GTTATAATAA	ATAGCTGATA	GCTTGTGTTG	GTTTTGGATT	TTTTAAGAGT	420
AGATGAGTAT	TAAAACTATA	AGGAGGACGA	AGGTGGCTAA	AAATTTAAAA	TTAAAATTAG	480
CTCGGGTAGA	GCGTGATTTA	ACACAAGGTC	AACTGGCAGA	GGCTGTCGGG	GTGACACGCC	540
AGACTATTGG	TTTAATAGAG	GCGGAAAAAT	ACAATCCCAG	TCTCTCGCTC	TGCCAGTCTA	600
TTTGCAGATG	TTTAGGGA	ACCCTAGACC	AACTATTTTG	GGAGGAAGAA	GATGAAAAAT	660
AGATTTTATT	ATTCTCAATT	ACTAGACGAA	AGAGAAGAAC	AACTGTTCAA	TAAAGCGGGC	720
TCTGAAAGTT	TCTATATCTG	CATTGCTTTG	TCGCTCCTAT	CTTATATCAT	TTCAGTATTA	780
GCACCAAGCC	TTTTTAATTC	TAATATGCTG	CTAATCGTTA	TCATCATAGG	GACATTTTAC	840
TTTTTCAATC	GTGCCCGTTA	TCTGGGAGTG	ACCTACTATG	GTGTTTTTCA	TTTTTACGATT	900
TTGGGTGTT	TTTTCCTAAC	CTTGCTATT	ACGGCTCTTT	TGATGTGCA	GAATTATCAA	960
TTCAACATAG	AAATTATCA	GCACAATCCT	TTGAATTTTA	AATACCTGTC	TGCTTGGGTC	1020
ATTACTTATA	TCATTTACCT	TCCGTGGATC	TTTATTTGCA	ATCTTGGTCT	TAAGAGCTAT	1080
GGCGAATGGG	CTCAGAAAAA	ATTTGAACAA	GATATGGATG	AATTGGAGAG	TGGAGAATAG	1140
CTTGTTACTC	TTTTCTCAAT	CCAGCTAAAA	TGTGATATAA	TAGTACTAAT	TTATTGGAAT	1200
ACATGAAAGT	TCTTGAAAAAT	TTTCATGGGT	TTCTAGCTAA	GGAAGTAGGA	AAAGTATGTA	1260
TCCAGATGAT	AGTTTGACAT	TGCACACGGA	CTTGTTACCAG	ATCAACATGA	TGCAGGTTTA	1320
CTTTGACCAA	GGGATTCACA	ATAAGAAGGC	GGTCTTTGAG	GTGTATTTCC	GCCAACAGCC	1380
TTTTAAGAAC	GGCTATGCGG	TTTTTGCAAG	TTTAGAAAGA	ATTGTGAAC	ATCTTGAAGA	1440
CTTGCGTTTT	TCAGATAGTG	ATATAGCCTA	TTTGGAGTCG	CTTGGTTATC	ATGGGGCGTT	1500
CTTGGAATTAC	CTTCGCAATT	TCAAGTTGGA	GTTGACCGTT	CGTTCTGCCC	AAGAAGGGGA	1560
TTTGTTTTTT	GCTAATGAAC	CGATTGTGCA	GGTGGAAGGA	CCTCTAGCCC	AATGTCAGTT	1620
GGTCGAAACG	GCTCTTTTGA	ACATCGTCAA	CTACCAGACT	TTGGTGGCGA	CGAAGGCAGC	1680
TCGTATTCGT	TCGGTTATCG	AAGATGAACC	CTTGATGGAG	TTTGGGACAC	GTGGGGCTCA	1740
AGAAATGGAT	GCGGCCATCT	GGGGAACACG	CGCAGCTGTG	ATTGGTGGCG	CCAATGGAAC	1800
CAGCAACGTG	CGTGCGGGTA	AGCTCTTTGA	CATTCCTGTT	TTGGGAACCC	ATGCCCATGC	1860

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CTTGGTACAG	GTTTATGGCA	ATGACTATGA	AGCTTTCAAG	GCTTACGCTG	CGACCCACAA	1920
AAATTGTGTC	TTTCTTGTGG	ATACCTATGA	CACCCCTTCGC	ATCGGTGTAC	CAGCTGCCAT	1980
TCAGGTGGCG	CGTGAGCTGG	GTGATCAGAT	TAACTTTATG	GGTGTGCGGA	TTGACTCTGG	2040
GGATATTGCC	TACATTTCTA	AGAAAGTCCG	TCAGCAACTG	GATGAGGCTG	GATTTACAGA	2100
GGCTAAGATT	TATGCTTCTA	ATGATCTAGA	TGAAAATACC	ATCCTTAACC	TCAAGATGCA	2160
AAAGGCCAAG	ATTGATGTCT	GGGGTGTGGG	TACCAAGCTG	ATTACAGCCT	ATGACCAGCC	2220
GGCTCTTGGG	GCGGTTTACA	AGATTGTTGC	AATCGAAGAT	GAAACTGGTC	AGATGCGCAA	2280
TACGATTAAG	CTGTCTAATA	ATGCTGAAAA	AGTTTCTACG	CCAGGTAAGA	AGCAGGTGTG	2340
GCGCATTACC	AGTCGTGAAA	AAGGCAAGTC	AGAAGGCGAC	TATATCACTT	ATGATGGTGT	2400
GGATATTAGC	GACATGACAG	AAATCAAGAT	GTTCCATCCG	ACCTATACAT	ACATCAAGAA	2460
GACGGTTCGT	AATTTTGATG	CCGTTCTCT	CTTGGTGGAT	ATCTTCAAAG	AAGGAATATT	2520
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GTTGTGGGAT	GAGTATAAGC	GTGTGCTCAA	TCCGCAGCAC	TATCCAGTGG	ATTTGGCGCG	2640
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GGACGTTTGG	CGCAATTAGC	TATGGAAGAA	CTGCGAGCTG	AAACGGGAGA	CGATAGCTAC	2940
AAATTTATCG	CTGTCCGCCT	GCCATACGGA	GTGCAAGCTG	ATGAAGCAGA	TGCTCAAAAA	3000
GCCCTAGCCT	TCATCCAGCC	AGATGTCAGC	TTGGTTGTGA	ATATCAAGGA	ATCAGCTGAT	3060
GCCATGACAG	CTGCAGTTGA	AGCGACAGGT	AGTCCTGTTT	CAGACTTCAA	CAAGGGGAAT	3120
ATCAAGGCAC	GTTGCCGTAT	GATTGCTCAG	TATGCCCTTG	CTGGTTCCCA	TAGCGGAGCG	3180
GTCATTGGAA	CAGACCACGC	CGCGGAAAAT	ATCACAGGTT	TCTTTACCAA	GTTTGGTGAC	3240
GGCGGTGCGG	ATATTCTCCC	TCTTTACCGC	CTCAATAAAC	GCCAAGGAAA	ACAGCTCTTG	3300
CAGAAACTTG	GCGCAGAGCC	AGCCCTTTAT	GAAAAAATCC	CAACGGCAGA	CCTAGAAGAA	3360
GATAAACCAG	GCCTAGCTGA	CGAAGTCGCA	CTTGGAGTCA	CCTACGCAGA	GATTGACGAC	3420
TACCTAGAAG	GCAAAACAAT	CAGCCCAGAA	GCTCAAGCGA	CCATTGAAAA	CTGGTGGCAC	3480
AAAGGCCAAC	ACAAACGCCA	CTTACCCATC	ACCGTATTTG	ATGACTTTTG	GGAGTAAAAA	3540
GGTCCGGGGG	ACCTTTTATG	CTTCTTGCCC	TGAAATTAAA	AAGCAAGAAA	AACCTCCACT	3600

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ACCCCGAGTT TAGAAATAAG AAAATGAGGC AGATTCAGTA ACTCGAAGAG TTCGATTTC	3720
TCGTCTTACC CCTGCAACGA TGACTAGGTT TGAAAAAGCT TGCTAGAGCG CATTTCAAAC	3780
CAGGCAGCAA CTGCGTCAAG AAATTAGAAG ACAAACCTCGT TTTCTAGCTG TTAGTGAGTT	3840
GAGCCTTTTT ACTACGAGTA TAGAAATAAG GAAGTGAGGT AGCATCATGA AATCTATCGG	3900
TACGCAAATA TTACAGACAG AACGTTTGAT TTTAAGAAGA TTTGTGGAGA GTGATGCAGA	3960
AGCCATGTTT CAAAATTGGG CTTTCATCCGC TGAGAATCTG ACCTATGTTA CCTGGGATCC	4020
CCATCCTGAT GTCGAAATCA CTCGAAACTC GATTTCGAAT TGGGTGCTT CCTATACTAA	4080
TCTCAACTAT TATAAATGGG CCATTGTCT AAAAGAAAAC CCAGAGCAAG TAATAGGAGA	4140
TATCAGCATT GTTAAGATAG ACGAGGCTGA TTTAAGCTGT GAAATTGGCT ATGTGTTAGG	4200
CAAGGCTTAC TGGGGAAATG GTATGATGAC AGAGACTTTG AAAGCTATCT TGGACTTTTG	4260
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AGGTCGTGTC ATGGAAGAG CTGGAATGTC CTATCTACAA ACCATTGTTA ATGGTGTAGA	4380
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TCTATTTTCT GTTTCTATCG AAGTCAACTA TTTATTGTAA ATATAATAAT TAGCATTCCA	4500
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TATTCATGTT TTTTCTATCA AATTATCTAA TATTAAAATA GTCTCATTCT GATGAGAAAA	4800
CTATCCCAA ATCATTCATA CCTCTCTCAA CTAGATGTAA CTTACAAAAC CCCTGACCTC	4860
ATGAGCCACT TTCTTCCTCC TCATGAGGTC AGTTTTACTT TCTGCTGTT CAGTATCGTT	4920
TTTCCTCGCT AGATTTCCCTC AAAAGGGCAG ACTCCTCCCT TGGTGCGTCA CACGATTTTT	4980
TCATCTCGAC TGTTCCTTAA TGCATCATTA ACGACGCTTT TCTTCTAGGT GGTTCATAAG	5040
GAACAGGAAG ATTCAGGTTG ACTTTTCTAA TCCTAGAATA AAGTGCTGAA AACAATTCGG	5100
AATAGGCATA GAGACTAGAC AATTTGAGGA GCTGCTTGCG TCCTGTTCGA ACACATTTTC	5160
CCACCACGTG AAGAAAAAGA TGGCGGAAGC GTTTGATTGT TAAAGTTTGG AAGTCACCTC	5220
CAGCTAGATG TTTGAGAAAA AGATAGAGAT TGTAGGCGAT ACAGCTCATC ATCATACGAA	5280
CTTCGTTTTT GATTAAGGTT GAACT	5305

(2) INFORMATION FOR SEQ ID NO: 136:

919

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 3964 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 136:

TGGCAGCTCG TCGTCGTAAA GGACGCAAAG TTTTGGCTGC ATAATCCAAA CGAATTCTAT	60
CAAAAATCAG TAGGAACTCG AGTCTACTGA TTTTATTTT TGTAAAAAAG TTCAGTAGAT	120
GCAAATGGAT TCGGAAGCGA TGTTACAGTA GATTGAAACT AGAATAGTAC ACCTCTGTTT	180
CTAAAACATT GTTAGAAATC GATTTGACTG TCCTGATCGA TTTGTCCCTGT TATTATTTTA	240
TTTTACTATA AAGTTGAAGT AGGTGGAGAT GGTACAGCAA CAATCGTCTT TAAAGATGGT	300
TCAGCTATTA CAATTCCAGG AAATCAATTG GTAGCACAAAG ATCCAAAAGC ACAAGATAGC	360
ACTAAACTGA CTGCTGAAAA ATCAACTGTT AAAGCACCTG CTCAAAGAGT AGATGTAAAA	420
GATATAACTC ATTTAACAGA TGAAGAAAAA GTTAAGGTTG CTATTTTACA AGCAAATGGT	480
TCAGCATTAG ACGGAGCGAC AATCAATGTA GCTGGAGATG GTACAGCAAC AATCACATTC	540
CCAGATGGTT CAGTAGTGAC GATTCTAGGA AAAGATACAG TTCAACAATC TGCGAAAGGT	600
GAATCTGTAA CTCAAGAAGC TACACCAGAG TATAAGCTAG AAAATACACC AGGTGGAGAT	660
AAGGGAGGCA ATACTGGAAG CTCAGATGCT AATGCGAATG AAGGCGGTGG TAGCCAGGCG	720
GGTGGATCAG CTCACACAGG TTCACAAAAC TCAGCTCAAT CACAAGCTTC TAAGCAATTA	780
GCTACTGAAA AAGAATCAGC TAAAAATGCC ATTGAAAAAG CAGCCAAGGA CAAGCAGGAT	840
GAAATCAAAG GCGCACCGCT TTCTGATAAA GAAAAAGCAG AACTTTTAGC AAGAGTGGA	900
GCAGAAAAAC AAGCAGCTCT CAAAGAGATT GAAATGCGA AACTATGGA AGATGTGAAG	960
GAAGCAGAAA CGATTGGAGT GCAAGCCATT GCCATGGTTA CAGTTCCTAA GAGACCAGTG	1020
GCTCCTAATG CTGCTCCTAA GACAACAAGT GCACCGCAAG CAACTGCAGG AACAATGCAA	1080
GATGTTACCT ACCAGTCACC TGCTGGCAA CAATTACCTA ACACAGGTC AGCATCAAGT	1140
GCAGCACTG CTAGTCTTGG TCTAGTGGTG GCAACAAGTG GTTTTGCTTT GCTAGGAAGA	1200
AAGACTAGAC GTAGAAAATA GAACAGCTAG AAAATTCTAT TCTCTACTTA AAGTTAGATT	1260
ATAAGGGGGA TTTTGAGAAG TCATCAATCC TAGTGATGGG TGAGAAAAGT GAGAACCCAA	1320
GATAATCACA TACTTTAGCT GAATAGGAAT ATTCTATCAA TGTAGCCAAT CTCTTCTGTC	1380
TCTAACTGTG GAATAGGAGA TGGGCAATAT CGGATAGAAA AGATAGCAGA ATAGCTCTCT	1440

920

ATTGAAGAGA	GGAGGGGAAA	CCGAAAAATT	AGGTGCCCCCT	CCTCTTTTTT	GGTATAATAG	1500
AAGATAGAAA	ACGAGGTTAG	AAGAGATGAT	TTTTGATACA	CATACACACT	TGAATGTAGA	1560
AGAATTTGCA	GGTCGTGAGG	CAGAAGAAAT	TGCCTTGGCT	GCTGAGATGG	GTGTGACACA	1620
GATGAATATT	GTTGGTTTTG	ATAAACCGAC	GATTGAGCAT	GCCTTGGAGT	TGGTAGATGA	1680
GTATGAGCAG	CTCTATGCGA	CTATTGGTTG	GCATCCTACA	GAAGCTGGTA	CTTATACAGA	1740
GGAAGTTGAG	GCTTACTTGT	TGGATAAGTT	AAAACATTCC	AAGGTTGTGG	CTTTAGGTGA	1800
AATTGGCTTA	GATTACCATT	GGATGACAGC	GCCCAAAGAG	GTGCAGGAGC	AGGTTTTTCG	1860
CCGTCAGATT	CAGCTATCTA	AGGACTTGGA	TTTGCCTTTT	GTTGTCCATA	CCCGTGATGC	1920
GCTGGAAGAT	ACCTATGAGA	TTATCAAGAG	TGAGGGCGTT	GGTCTCGTG	GTGGTATCAT	1980
GCATTCATTT	TCAGGGACGC	TTGAGTGGGC	AGAGAAGTTT	GTGGATCTTG	GTATGACCAT	2040
TTCCTTCTCA	GGAGTGGTGA	CTTTTAAGAA	GGCAACTGAC	CTCCAAGAAG	CAGCTAAAGA	2100
GTTACCTTTG	GACAAGATGT	TGGTGGAAC	AGATGCGCCT	TACTTAGCAC	CTGTACCCAA	2160
GCGTGGTCGT	GAAAATAAAA	CAGCCTATAC	TCGCTATGTG	GTCGACTTTA	TCGCTGACTT	2220
GCGTGGTATG	ACGACAGAAG	AGCTGGCGGT	AGCAACGACT	GCAAATGCAG	AACGAATTTT	2280
TGGACTGGAC	AGCAAGTAAT	GAAAGAGAAA	ATTTCTCAAG	TTATCGTGGT	TGAAGGGCGT	2340
GATGATACGG	TCAATCTCAA	ACGTTATTTT	GATGTGGAGA	CCTATGAGAC	TCGAGGTTCT	2400
GCCATCAATG	CTCAGGATAT	AGAGCGGATT	CAGCGCCTGC	ACCAACGTCA	TGGAGTCATT	2460
GTCTTTACAG	ACCCAGATTT	TAATGGGGAA	CGGATTCGGC	GCATGATCAT	GATGGTCATT	2520
CCAACAGTTC	AGCATGCCTT	TCTCAAGCGA	GATGAAGCTG	TTCCCAAGTC	CAAGACCAAG	2580
GGGCGTTCCT	TGGGAATTGA	GCATGCCAGC	TATGAAGACC	TGAAAACGGC	TCTAGCTCAA	2640
GTGACAGAAC	AATTTGAACA	TGAGAGTCAG	TTTGACATTA	GTCGTAGCGA	TTTGATTTCGC	2700
CTTGGTTTTT	TAGCAGGGGC	AGACAGCCGT	AAGCGTAGAG	AATATCTCGG	AGAGACTCTC	2760
CGAATCGGCT	ATTCCAACGG	CAAGCAACTC	CTCAAACGCC	TAGAGTTGTT	TGGGGTTACT	2820
TTGGCAGAAG	TGGAAGAAGC	TATGAAATCT	TATGAGTAGG	AAAGATGTAG	CCGTTACAAT	2880
TTTTTAAGTT	TCACAGTATT	TTTCGAAGCA	GGTAGAAGAG	GAGGCGTCTG	ATGTTAATTG	2940
GTCAAAAAAT	TAAAGAGATT	CGGATAGAAA	AAGGAATTAG	TCGTCCAGAT	TTTTGTGGAG	3000
ATGAGCAAGA	ACTGACAGTT	CGTCAACTGT	CGCGAATTGA	AAGTGGAGCT	TCGCAACCGA	3060
GTTTGCCCAA	GTTAGACTAT	ATTGCTCGCC	GGCTAGGAGT	TCCAGTTTAT	AGCCTTATGC	3120
CGGATTTTTT	AGCTCTTCCT	TCTGCTTATT	TAGAATTGAA	ATACCAGATT	TTACGTGAAC	3180
CAATCTATGG	TAAAGAAGAG	GAGTACGATA	AGAAGGAAGC	GTGTTTGGAA	GAGATTTATA	3240



921

AAACATACTT TGATAATCTT CCTAAAGAAG AACAAATTAGC ATGTGAAGTA TTGCAGGCGT	3300
GTTTGGATAC TTCTAGAACT AGAAGGCCTG AATATGCAGA GTTAATACTT GAGGAACATA	3360
TGCCCTCAGAT TATAGAAAAA GAAGCTTATT CAATAAATGA TATGTTGTTG ATTCGTTTGT	3420
TTTTTTATCA AATGCTCATT AGAAAAGATC TTGCCAAAT TATAAATCAA ATCGAAAAGC	3480
TAATGCTCTT TCTTTTGGAA CAGAAGAAGG TAACTCAAAT AGAGAATTAC TTTATAATTA	3540
GAGATACTCT TATTTTCAGGA ATGTGTTGTC TTGAAAAGGT AGGAGTAACT GATTGTTTTA	3600
ATGATTATCT ATCGTGTTTA CAAGAAATTA TGGATAAAAC TCAAGATTAT CAAAAGAAAC	3660
CTCTTGATTT TATGTTTTTG TGAAGCAAG CATTAAGAGA AGAAAGAGAT TTTAGTTTAG	3720
CTGAATCAT TTTATCAGTCT TCTAAACAT TTGCGCAGCT AATTGGAGAT GAATTTCTAG	3780
TAAAGAAATT GACAGAGGAA TGGCAAGAGG ATGTCAAAAA ATATTTATAA ACATAGTGAA	3840
TCAGTGACAA AGATGTCCTT GTCCTCGTAT CAAAACAGTT CTAAAGTTCG TCTTTAGGGA	3900
TGTTTTTTTA GATATAAGCT AAAAATGACA CGAAATGGTT AGATTTTAAG GACATTGATG	3960
TCCG	3964

(2) INFORMATION FOR SEQ ID NO: 137:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 12666 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 137:

TGAGACCGTT ATTTGTATTA GGGAAATGGG TATCTATTTT TAATGCTGTG GGGATTTTGA	60
TTGTTTCTAT TATTCAAACC AAAAGCTTGT CAGGTATTGG AGCAGGATTG TTTAATCTAT	120
ATAACATTTT ATCTTATATA GGTGATTTAG TTAGTTTCAC TCGATTGATG GCATTAGGAT	180
TATCTGGAGC AAGTAGCA TCAGCTTTCA ATTTAATTGT TGGTTTGTTC CCGGAATAT	240
TGGCTAAACT GACAATTGGA TTAGTATTAT TCATTCTTTT ACATGCGATC AATATTTTTC	300
TATCGTTACT ATCAGGATAT GTTCATGGAG CACGTCTGAT ATTTGTTGAA TTTTGTGTA	360
AGTTTATGA GGGTGGAGGA AAACCATTTT AACCTTTGAA GGCTTCTGAG AAATATATTA	420
AGGTTATTAC AAAGAATTAA TGGAGGATAT ATATAATGGA ACATTTAGCA ACTTATTTTT	480
CAACCTATGG AGGAGCTTTC TTCGCTGCAT TGGGAATTGT ATTGGCGGTT GGATTAAGCG	540
GTATGGGGTC TGCTTATGGA GTTGTAAGG CTGGGCAATC TGCCGCAGCT TTAAGTAAAG	600

922

AACAGCCTGA AAAGTTTGCC TCAGCTTTGA TATTGCAATT ATTGCCCGGA ACACAAGGAT	660
TATATGGTTT TGTATTGGA ATTTTAATTT GGTGCAATT AACTCCAGAA CTTCTTTAG	720
AAAAAGGCGT TGCTTATTTC TTTGTAGCTC TTCCAATTGC TATTGTAGGA TACTTTTCAG	780
CTAAGCATCA AGGAAATGTA GCAGTAGCGG GAATGCAAAT CTTGGCTAAA AGACCAAAAG	840
AATTCATGAA GGGAGCAATT TTAGCTGCCA TGGTAGAAAC CTATGCAATT CTTGCTTTTG	900
TCGTATCATT CATTTTGACC CTTCTGTAT AAGAAATAAA TTTGCAATTC AAAGGAGGTG	960
TCTAAATGAG CAATTTAGAA AACTTACGAG AGTCTGTTAT TGAACAAGCT CATGAAAAAG	1020
GGCGTATGAA ATTATTGGAT TCCAAAAAGA AGATTGATGA TGAATTTGAA ATGCAAAAGT	1080
CGCTCATTAT AAAGAAAAAA GAAGCTGAAC ATGAACGAAA GTTAAAAGAA TTGCAACAGA	1140
AATATCAAAT AATTTTCAA CAATTAATAA ATAAGGAACG CCAATCAACG TTAGTATCAA	1200
AACAGAAAAT ATTAAAAGAA CTTTTTCAAT CTGCTTTACT AGAAATGGAA TCTTGGAGTG	1260
CAGATAAAGA AATGGAGTTC ATCTATCGAA TTCTGGAACG ATATTCACAA CAAGAGGTCA	1320
TAGTAACCTT TGGGGAACGG ACTTTAGCTA AATTCAAATT GGAACAATTA GAGAAATTGA	1380
AATTCTCTTT TCCAAATTAT TTATTTAGTG AACAACCTAT CTCAAATGAA TCAGGCTTAC	1440
TTATTTCAAT AGGTAAATTT GATGATAACT ATTTGTATAA AACATTAATT GGATCGATT	1500
CTAAGGAAGA AAGTTCAAGT ATCGCAAATC AAATTTTAT CAATTAAGGA TGAAATTGGT	1560
TAATCCTTCT TAGAAATTG GAGTATTCCA ATAAATTAG AAAGGTATTT TATGGATACT	1620
AATCTTTTTT CAAAAATAA TACGACGATT TCGGTAAAAG AAAACGATTT TATTACAGAA	1680
GAAAAATTTC AAAAAATAT ACAATCCAAA GATACGGAGA CATTGGCATT TATCTTAGAA	1740
TCAACTCCCT ATCATTTATC GATTGACATC TTAGAAGATC CTAGTCAGAC AGAGATTTCG	1800
CTAATGACAA AATTAGTCAA TGATTATAGA TGGGCCTATG CTGAAAGTCC GTCTGATATA	1860
ATTGTGACTT TATTTGCTTT ACGATATGTT TATCATAATA TCAAAGTTT ATTAAAATCT	1920
AAGGCGGCAA TTAAGAAAGA TTTTCTAAA TTATTAATTC CAATAGGGAT TTTTGATATA	1980
GAAAGTTTAA AACATTTAGT TTCTTCCTTA CATTCAGATA CACTTCCTGA TTTTATGGTT	2040
CGTGAAGTAG AATCAATTG GAATGAGTAT GAACTTTTA ATAATATTCG TGFACTTGAT	2100
GTCGGAGCTG ATCTAGCATA TTTTAAACAT CTGAACTTT TATCTAATGA GTTAGATGAG	2160
GTACTGTCTC AGGTTATTGT CGAAATGATT GACTTTTATA ATATTATTAC TGTAAAACGT	2220
GGTTTATCTC AAAATAAGAG TCATGGGGAT ATTTTACAAT TACTTTTACA TGAAGGAAGT	2280
ATTTCTGCTA AAGAATTTAT ATACATTGTA GAAAATCAAG AAATATTTGT GTGGTTCAAT	2340
AAAATAAATC CAAGCTTAGA TTCAATCTTT TCAACTTATG AATTGAAGAT GCAGGACGCA	2400

ACAATTTCAT	CTTCTGAGTT	AGAATTTT	TGTGATTTAC	TATTGTATAA	AACTTTAGAT	2460
CAAGGAAGGT	ACAATGTAGA	GGGGCCGTTA	GTTCTTGCTA	GATATTTATT	GGGATGTGAG	2520
TTTGAAGTAA	AGAATCTCAG	AATGATCATA	TCAGCTCTTC	AAAATACAAT	TCCCTTTGAA	2580
TCAATAAAAG	AAAGGATACG	CCCACATTAT	GGAAGCTAAT	AAGTATAAAA	TTGGCATAAT	2640
TGGTAGCCGT	GATATTATTT	TACCATTTAG	CATGATTGGG	TTTGATATAT	TCCTGCCTA	2700
CCAAGAACAA	GAAGCTATAA	ATACACTAAG	AAAATTAGCT	CAATCTGATT	ATGGTGTCAT	2760
TTATATCACT	GAAGACATTG	CTTCAATGAT	ATTAGATACA	ATTCGCCATT	ATGATTCCCA	2820
AGTTGTGCCT	GCTATTATTT	TATTACCGAC	TCATAAACAA	GGTTTAAATT	TAGGATTAAA	2880
ACGTATAGAG	GATAATGTAG	AGAAAGCAGT	AGGACACAAT	ATTTTATAAT	AATGTACAAA	2940
ATTGTCTGTA	ATATTATTCT	ATAATTTT	GACTTAGTAA	GGAGAATAAC	TTGACTCAA	3000
GGGAAGATTA	TAAAAGTATC	GGGACCTCTA	GTTATTGCAT	CAGGTATGCA	GGAGGCTAAT	3060
ATTCAAGATA	TTTGCCGTGT	AGGTAAGCTA	GGGTAAATCG	GTGAAATTAT	TGAAATGAGA	3120
AGAGATCAGG	CATCTATCCA	AGTCTATGAA	GAAACATCTG	GTCTTGGTCC	GGGAGAACCT	3180
GTTGTTACAA	CTGGAGAACC	TCTCTCGGTT	GAATTAGGGC	CAGGATTGAT	TTCTCAAATG	3240
TTTGATGGCA	TACAACGCCC	ATTAGATCGA	TTTAAATTGG	CTACTCATAA	TGATTTTCTA	3300
GTTCTGTGGG	TAGAAGTTCC	AAGTTTGAT	AGAGATATTA	AGTGGCATT	TGATTCCACT	3360
ATAGCAATTG	GTCAAAAAGT	GAGTACGGGT	GATATTCTTG	GAAGTGTCAA	GGAAACCGAG	3420
GTAGTTAATC	ATAAAATTAT	GGTTCCTTAT	GGAGTATCTG	GAGAAGTCGT	TTCTATTGCA	3480
TCTGGCGATT	TTACAATTGA	TGAAGTTGTA	TATGAAATAA	AAAAATTGGA	CGGTAGTTTC	3540
TATAAAGGAA	CGCTTATGCA	AAAATGGCCT	GTCCGCAAGG	CGCGTCCTGT	TTCTAACCGT	3600
TTAATTCCAG	AAGAACCATT	AATCACAGGT	CAACGAGTTA	TTGATGCATT	CTTTCCAGTA	3660
ACCAAAGGGG	GAGCTGCAGC	AGTTCCTGGA	CCGTTTGAG	CAGGAAAGAC	AGTTGTACAA	3720
CACCAAGTAG	CTAAATTTGC	CAATGTTGAT	ATTGTTATTT	ATGTCGGTTG	TGGAGAACGT	3780
GGAAATGAAA	TGACGGATGT	ACTGAATGAG	TTTCCTGAGT	TGATTGACCC	TAATACCGGA	3840
CAATCAATTA	TGCAACGGAC	AGTTCCTGATT	GCTAATACTT	CAAATATGCC	TGTTGCTGCT	3900
CGTGAGGCTT	CAATTTATAC	AGGAATTACC	ATGGCTGAGT	ATTTTCGTGA	TATGGGCTAC	3960
TCTGTCGCCA	TTATGGCTGA	TTCAACTTCA	CGTTGGGCAG	AAGCGCTACG	TGAAATGTCA	4020
GGACGTCTAG	AAGAAATGCC	TGGTGATGAG	GGTTATCCTG	CTTATCTGGG	AAGTCGTATC	4080
GCTGAATATT	ATGAAAGAGC	AGGACGTTCT	CAGGTTCTAG	GGCTTCCAGA	ACGTGAAGGA	4140

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ACGATTACTG	CTATTGGAGC	TGTATCGCCA	CCTGGTGGAG	ATATTTCAAG	ACCAGTTACT	4200
CAAAACACTT	TACGGATTGT	GAAAGTTTTT	TGGGGGCTTG	ATGCTCCGTT	GGCACAGCGA	4260
CGTCATTTTC	CTGCAATTAA	CTGGCTTACA	TCTTATTCAC	TATATAAAGA	CAGTGTGGGC	4320
ACTTATATAG	ATGGTAAAGA	GAAGACAGAT	TGGAATAGTA	AAATAACTCG	TGCGATGAAC	4380
TACTTACAAC	GGGAATCTAG	TTTAGAGGAA	ATTGTTTCGTC	TTGTTGGAAT	TGATTCTCTG	4440
TCTGATAATG	AACGACTAAC	GATGGAAATT	GCTAAACAAA	TTCGAGAAGA	TTATTTGCAA	4500
CAGAACGCTT	TTGATTCGGT	AGATACATTC	ACTTCGTTTG	CAAAACAAGA	AGCAATGCTA	4560
AGTAATATTC	TCACTTTTCG	TGATCAGGCA	AATCATGCTT	TAGAGTTGGG	TTCTTACTTT	4620
ACAGAGATTA	TGGAAGGTAC	CGTGGCAGTT	CGAGACCGTA	TGGCGAGAAG	TAAATATGTT	4680
TCAGAAGATA	GATTAGATGA	AATCAAAATT	ATATCAAAATG	AGATTACACA	TCAAATTCAT	4740
TTGATATTAG	AAACAGGAGG	TCTATAAATG	AGTGTTATAA	AAGAATACAG	AACTGCTAGT	4800
GAAGTTGTTG	GGCCTCTTAT	GATTGTTGAA	CAAGTAAATA	ATGTGTCTTA	CAATGAGTTA	4860
GTTGAAATTC	AACTTCATAA	TGGAGAAATT	CGTCGTGGAC	AAGTTTTAGA	GATCCACGAA	4920
GATAAAGCAA	TGGTTCAGCT	TTTTGAAGGA	TCTAGTGGAA	TAAATTTAGA	AAAGTCTAAA	4980
ATTCGTTTTC	CTGGTCATGC	ATTAGAATTG	GCTGTATCTG	AGGATATGGT	TGGTCGTATT	5040
TTTAATGGGA	TGGGAAAACC	AATTGATGGT	GGACCAGATT	TAATTCCAGA	GAAATATTTA	5100
GATATTGATG	GTCAAGCTAT	TAATCCTGTA	TCTAGAGATT	ATCCAGATGA	ATTTATTCAG	5160
ACAGGGATCT	CCTCTATTGA	TCATTTGAAT	ACTCTTGATC	GTGGTCAAAA	ATTACCAGTA	5220
TTTTCAGGTT	CGGGCTTACC	TCATAATGAA	TTAGCTGCTC	AGATAGCAAG	ACAAGCGACT	5280
GTTTTAAATT	CTGATGAAAA	TTTTGCGGTT	GTATTTGCAG	CAATGGGTAT	TACTTTTGAA	5340
GAAGCTGAGT	TTTTTATGGA	AGAACTCAGA	AAAACAGGAG	CGATCGATCG	TTCGGTTTTA	5400
TTTATGAACT	TGGCAAATGA	TCCTGCAATT	GAGCGTATTG	CAACTCCCCG	CATTGCTTTA	5460
ACTGCGGCAG	AGTATCTAGC	TTTTGAAAAA	GATATGCACG	TTCTAGTTAT	CATGACGGAT	5520
ATGACTAACT	ATTGTGAAGC	GTTACGTGAA	GTCTCGGCAG	CTCGCCGTGA	AGTTCCAGGG	5580
AGACGAGGCT	ATCCGGGATA	TTTATATACA	AATTTATCAA	CTCTATACGA	AAGGGCTGGT	5640
CGCTTAGTTG	GTAAAAAAGG	TTCCGGTGACA	CAGATTCCTA	TTTTAACAAT	GCCAGAAGAT	5700
GACATAACAC	ATCCAATTCC	TGATTTAACT	GGATACATTA	CTGAAGGGCA	AATTATTTTG	5760
TCGCATGAGT	TGTATAATCA	AGGTTATCGT	CCACCAATCA	ATGTTTTACC	TTCTCTCTCT	5820
CGATTAAAAG	ATAAGGGATC	TGGAGAAGGT	AAAACTCGTG	GAGATCATGC	TCCAACATATG	5880
AATCAACTGT	TTGCAGCCTA	TGCCCAAGGG	AAAAAGGTTG	AAGAGTTAGC	AGTAGTATTA	5940

925

GGAGAATCGG	CTTTATCTGA	TGTAGATAAA	TTGTATGTGA	GGTTTACAAA	GCGTTTTGAA	6000
GAAGAGTACA	TAAACCAAGG	ATTTTATAAA	AATCGAAATA	TAGAAGATAC	GTTGAATCTT	6060
GGGTGGGAAT	TACTATCAAT	TCTTCCTAGA	ACAGAGTTAA	AACGTATCAA	AGATGATTTG	6120
CTTGATAAAT	ACTTACCTTT	GGTAGAAGTT	TAATCCGGAA	ATGGAGTGAT	TATCTATGGT	6180
ACGTTTGAAT	GTAAAACCAA	CTCGTATGGA	ATTGAATAAC	TTAAAGGAAC	GTTTGACAAC	6240
AGCTGAACGT	GGACATAAGT	TATTAAAGGA	TAAAAGAGAT	GAATTGATGA	GGCGATTTAT	6300
TTCTTTGATT	CGTGAGAATA	ATCAACTTCG	GAAAGAAGTG	GAAAGTTATC	TAATTGATAA	6360
TCTAAAATCC	TTTGCAGTTG	CTAAATCATT	AAAGAATTCT	CAAATGGTGG	AGGAATTATT	6420
TTCAATTCCA	TCGAAAGAAA	TTGAATTATT	TGTTGAGAAA	GAAAATATCA	TGAGTGTAAC	6480
AGTTCCTAGA	ATGCATATGA	ATATTACTTC	TCAAAATGAG	AACAGTGAAT	ACAGCTATTT	6540
ATCTTCTAAT	AGTGAAATGG	ATGATGTATT	TGCTACAATG	AATAGTTTAA	TTTATAAATT	6600
ACTAAGACTG	GCAGAAGTTG	AAAAAACGTG	TCAGTTAATG	GCTGATGAAA	TAGAAAAAAC	6660
ACGTAGACGT	GTAATGGTTT	TAGAATACTC	GATTATTCCA	AACCTGTCCG	AAACTATTCA	6720
TTATATAGAA	TTGAAACTAG	AGGAGGCAGA	AAGAGCCAAT	TTAGTTCGTA	TTATGAAAGT	6780
GAAGTAGATC	CTTTATTTAG	ATTATTAATT	AGATGAACAA	ATATCAGCTT	GGATAAGGCT	6840
TTAAGCCTTT	CTAAGCTTTT	TTTATTGACA	GTATCAGGAT	ATCTTTTTCa	AAATTTTGGT	6900
TTGTTAGATA	ATGAAAATGT	TTCTACTAAT	CTAGATTTAG	GATTAGTAAA	TCGTAAATGT	6960
AATTATATAG	AAAGTAAGCG	CGTCATAACA	AGGTATCTAT	CATTCATGGA	GCTCCTCCTG	7020
TATACTATTA	GTAAAGTAAA	ACTATTGGAG	GATATTTTAA	TGCCACAACC	TATTGTTCCCT	7080
GTAGAGATTC	CACAATCTCG	TCGTTTTGAT	TCTAAAAAGA	GAAATGATAT	TCTGCTTAAA	7140
ATTTCGTATTG	GCAAGCTTGA	AGTAAGTTTT	TTTCAATCTC	TCAATCTCGA	AATGGTAGAA	7200
CAGCTTTTGG	ATAAGGTGTT	GCTCTATGAC	AATTCACTCTA	TCTAGCCTAG	GGGAGGTCTA	7260
TCTCGTGTGT	GGGAAAACCTG	ATATGAGACA	AGGAATCGAT	TCACTGGCTT	ATCTGGTTAA	7320
AACCCACTTT	GAATTGGATC	CTTTCCTCCG	TCAAGTCTTT	CTCTTTTGTG	GTGGACGTAA	7380
AGACCGCTTT	AAAGTCCTTT	ACTGGGATGG	TCAAGGATTT	TGGCTACTAT	ATAAACGCTT	7440
TGAGAACGGC	AGATTGATTT	GGCTAAGTAC	AGAAAAGGAT	GTCAAAGCTC	TCACACCAGA	7500
ACAAGTAGAC	TGGCTTATGA	AGGGCTTTTC	TATCACTCCA	AAAATATAGT	AGATTGAAAC	7560
TAGAATAGTA	CACCTCTGCT	TCTAAAACAT	TGTTAGAAAT	CGATTTTACT	GTCCTGATCG	7620
ATTTGTCCTG	TTCTTATTTC	ATTTTACTAT	AAATCCATCA	GAAAGTCGTG	ATTTCTATTG	7680

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AAATGAGGAC	TTTCTTTT	TACTCATCTG	CTTTCAAAAA	GCATTCTAGT	CCATCTCCGA	7740
TTAACGATGG	ACTTTATCAC	CTCCTTCTCC	AGTCCTTGTA	TAACATCTTG	GAGTTGATTC	7800
ATGACATCTT	CCAAAGTTTA	AAAGGCTTTA	TTCTTAAATC	CACGTTTACG	AATCTCTTTC	7860
CACACTTGTT	CAATGGGGTT	CATCTCTGGT	GTGTATGGAG	GAATAAATGC	AAAGCCAATA	7920
TTAGTCGGAA	TCTTTAAGGT	ACTTGATTTA	TGCCATATAG	CATTGTCCAT	AACGAGTAAA	7980
AGATAATCAT	CTGGATAAGC	TTGTGAAATC	TCCTATTCCT	AAAGCCCCTT	TAGCGCATAA	8040
CTTTGGCTCA	GCTTCTATTA	TCGCTCACAC	CATCCATCAG	AAGTTTAATC	TGAAGGTACC	8100
CAATTATCGC	CAAGAAGAAG	ATTGGGCTAG	GATGGGTTTA	CCAATCACAC	GTAAGGAAAT	8160
CTCTAATTGG	CATATCAAGG	CGAGTCAATA	CTATTTGGAG	CCCCTTTATA	ACCTCTTGCG	8220
AGAGAGACTA	TTGACTCAGC	CCTTACTTCA	TGCGGATGAA	ACTTCTTATA	GGGTGCTAGA	8280
GAGTGATAGT	CAGCTGACTT	ACTATTGGAC	TTTTTTGTCA	GGTAAAGCAG	AGAAACAAGG	8340
GATTACGCTT	TACCACCATG	ATCAGTGTCT	AAGTGGTTCA	GTAAGTACAAG	AATTCCTAGG	8400
AGATTATTCT	GGCTATGTGC	ATTGTGATAT	TTTGCGGCAG	TAAGTTAGGA	CTTTAGTCCT	8460
CTAGTTCTGC	CTATGCGATA	GCAGTCCAAG	GTTTAGGAGC	AAGGCGACGC	TAAGCTTGGT	8520
AAACTTCGAA	CCGCTCGTCT	GCTTATCGTC	AACTGGAAGA	AGCTGAACTT	GTTGGATGTT	8580
GGGCGCATGT	GAGAAGGAAG	TTTTTTGAAG	CGCCCCCCCC	AGCAAGCGGA	TAAATCATCC	8640
TTAGGAGCTA	AAGGTTTAGC	TTATTGTGAT	CAGTTATTTT	CCTTGGAAG	AGACTGGGAG	8700
GCTTTGCCAG	CTGATGAACG	ACTACAGAAA	CGTCAAGAAC	ATCTCCAGCC	CTTAATGGAA	8760
GACTTCTTTG	CTTAGTGCCG	GCGTCAGTCA	GTTTATAGCAG	GTTCAAACT	AGGAAGGGCA	8820
ATTGAATACA	GCCTCAAGTA	TGAAGAAACC	TTTAAGACCA	TTTTGAAAGA	CGGACATCTG	8880
GTCCTTTCCA	ATAATCTAGC	TGAACGCGCC	ATTAAATCAT	TGGTTATGGG	ACGGAGTAAA	8940
AGAGTCCAGT	GGACTCTTTT	AGCCTAAGCT	CAGTTTAAAA	AAGCGAGGGT	GGTTATTTTC	9000
TCAAAGTTTT	GAAGGAGCTA	AAGCAAGAGC	TATTATTATG	AGTTTGTGG	AAACAGCTAA	9060
ACGTCATCAA	TTAAATAGCG	AGAAATATCT	ATCCTATCTT	CTAGAATGTC	TTCCAAACGA	9120
GGAAACTCTC	GTAACAAAG	AGGTTTTAGA	GGCTTATTTA	CCATGGACTA	AAGTTGTACA	9180
AGAAAAGTGC	AAATAAGAAA	TCTCCAGATT	AGGAACTATC	CGTGAGTTCT	CCAGTCTGGA	9240
GATTTTTCAA	TAGACTTCCT	GCGAAACAAA	ATATGGGTATA	ATAGTTCTAT	GAATGATGAA	9300
GCAAGTAAAC	AACTAACCAG	TGCACGATTT	AAGCGTCTTG	TTGGTGTTCA	ACGCACGACT	9360
TTTGAAGAGA	TGTTAGCTGT	ATTAAAAACA	GCTTATCAAC	TTAAACACGC	AAAAGGTGGA	9420
CGAAAACCTA	AATTAAGTCT	AGAAGACCTT	CTTATGGCCA	CTCTTCAATA	TGTGCGAGAA	9480

TATCGAACTT ATGAACAAAT TGCGGCTGTT TTTGGTATTC ACGAAAGCAA CTTAATCCGT	9540
CGGAGCCAAT GGGTTGAAGT AACTCTTGTT CAAAGTGGTG TTACGATTTC AAGAACTCCT	9600
CTCAGTTCTG AGGACACGGT AATGATTGAT GCGACGGAAG TAAAAATCAA TCGCCCTAAA	9660
AAAAGAATTA GCGAATTATT CTGGTAAAAA GAAATTTTAC GCTATGAAGG CTCAAGCGAT	9720
TGTCACAAGT CAAGGGAGAA TTGTTTCTTT GGATATCACT GTGAACATT GTCATGATAT	9780
GAAGTTGTTC AAAATGAGTC GCAGAAATAT CAGACAAGCT GGTAAAATCT TGGCTGACAG	9840
TGGTTATCAA GGGCTCATGA AGATATATCC TCAAGCACA ACTTCACGTA AATCCAGCAA	9900
ACTCAAACCG CTAACAATTG AAGATAAAGT CTATAACCAT GCGCTATCTA AGGAGAGAAG	9960
CAAGGTTGAG AACATCTTTG CCAAAGTAAA AACGTTTAAA ATGATTTCAA CAACCTATCG	10020
AAATCATCTA AACGCTTCGG ATTACGAATG AATTTGATTG CTGGTATTAT CAATCATGAA	10080
CTAGGATTCT ACTTTTGCAG GAAGTCTATT ATCAAAAATA CCATCAAGAT TATATAAGAT	10140
TGATACAGGA AAAGTTTAT TTGATGGTGT AAATATTAAT CAAATAGATA AAAAAATATT	10200
AAGTCAAAAT TTAGGAGTAG TTCCACAGGA TTCATTTTTA TTGAACCGAA GTATTCTTGA	10260
TAATATAACT TTAAAGCACG AAGTTACTTC ACAAAGATA GAGGAAGTTT GTAAAGCAGT	10320
TCAAATCTAT GATGAAATCA TGGCTATGCC GATGAAATTT AATACTATCA TCTCAGAGAT	10380
GGGGTCAAAAT ATTTACAGTG GGCAAAGCA ACGGATAGCA CTGGCACGTG CATTAATAAA	10440
TAATCCTAGT ATTGTAATTT TAGATGAAGC AACTAGTGCA TTAGACACTA TTAATGAGGA	10500
AAGAATAACA AAGTATATAC AAAGTCAGGG CTGTACTCAA ATAATTGTAG CTCATAGATT	10560
GTCAACGATT AAGGATGCGG ATGTTATTTT TGTAATGAAA GGTGGTAAGA TTGTTGAGTC	10620
AGGAAATCAT AAGTACTTAA TGGATCTTGG TGGAGAGTAC TACAGCTTAT ATACAAAAG	10680
GAAATGAGGT GTAAAGAAAA TGAAGAAAGA AAATGAATAT GTAATTTTAA CAACAGCCTC	10740
ACTAGGGGTG ATGATTGGAA TAGTGTTTGC AATTTTTTTA GATTTTCCAG TTGAATATGG	10800
TATTTCTTTA GGCTTGTTGA ATGGAATAGT ATTGGGTTTCG CTGATTGTTT ACAAACAA	10860
TAAGAATTAA GCATAATTTT TTGCTGTAAA CTAAGGAGTA GAGATGGCTA TAGTTGAAAT	10920
TATAAATCTA ACAAAGCT TTAAAGATAT TGAAGTTATT CATAACACTT AAATAATAGA	10980
GCAACTACAG TAGTAGCTTA AAAACATGAT TAAATCGCTA TTCTTAGGAG TAGCGGTTTT	11040
TCTTTTGTGTT TAATACTCTT TGAAAATCTC TTCAAACCAC GTCAGCTTTG CTTTACCGTA	11100
CTCAAGTACA GCCTGCGGCT CGCTTCCTAG TTTGCTCTTT GATTTTCATT GAGTATAAAA	11160
AGGGTCAAGT AAGTATAGTA AATTGAAATA AGATATGAAC AAATCGATTA GAAAAGTCAA	11220

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ATTAATTCT	AGAAATATGT	TAGAAATTGG	TTTGAATTCC	GCAATCAATT	TGTTCAAGTT	11280
TTATTTTCATT	TCATTTTATT	TAATTAGATT	TTCCAATTTT	TTAATTCAAG	CTAAAAATCC	11340
CCAATCGTAG	TGATTGAGGA	TTGAGTAAAT	AAATCTTAAA	CAATACCTTG	TGCAATCATG	11400
GCATTTGCTA	CATTTTCAA	GGCAGCAATG	TTAGCTCCTG	CAAGGTAGTC	TTTATCAAGA	11460
CCGTATGTTT	CTGAAGTCGT	TTTAGCTGTG	TTGAAGATGT	TTGTCATGAT	GTCTTTGAGA	11520
CGGCCATCAA	CTTCTTCACG	AGTCCATGAG	AGGCGAAGAC	TGTTTTGGCT	CATTTCAAGA	11580
GCTGAAACGG	CTACACCACC	AGCGTTGGCA	GCTTTTGCG	GTCCGTAGAA	GATACCATTT	11640
TCTTTGTAAA	CTTTGATGGC	ATCAAGGTCG	CTCGGCATGT	TGGCACCTTC	AGATACACAG	11700
ATAACGCCTT	GAGCAACCAA	ACGTTTAGCT	GCTTCACCGT	TGATTTCGTT	TTGAGTGGCA	11760
CATGGAAGAG	CAATGTCATA	GTTTCCAGCG	TAAGTCCATA	CAGTACCTTC	GTGGTAGGTT	11820
GCAGTTGCTT	TTTCAGCTGC	ATACTCAGTC	AAACGAGCAC	GACGTTTTTC	TTTAACATCA	11880
ACCAAAAGAT	CGAAGTCGAT	ACCATTTTCA	TCGATGACAT	AACCATTTGA	GTCAGAAACA	11940
GAAATAACAG	TTGCACCGAG	TTGAGTTGCT	TTTTGAAGAG	CATATTGAGC	AACGTTACCA	12000
GAACCTGAAA	TAACGACTTT	CTTACCAGCA	AAGCTGTTAC	CGTTAGCTTT	GAGCATTTCT	12060
TCAGTATAGT	AAACCAAACC	GTAACCAGTT	GCTTCTGGAC	GAATCAAGCT	ACCACCAAAT	12120
CCAAGAGGTT	TACCAGTCAA	GACACCAGCA	TCAAATTGGT	TAAGACGTTT	GTATTGACCG	12180
TAAAGGTAAC	CAATTTACAG	TCCACCAACA	CCGATATCAC	CAGCAGGTAC	GTCAAGTGAT	12240
GGTCCGATGT	GTTTTTGCAA	TTGAGTCATG	AAGCTTTGGC	AGAAGCGCAT	CACTTCAGCA	12300
TCTGTTTTAC	CTTTAGGATC	GAAGTCTGAT	CCACCTTTAC	CTCCACCGAT	AGGAAGTCCA	12360
GTCAAGACAT	TTTTTAAAGAT	TTGTTCAAAT	CCGAGGAATT	TCAAGATCCC	TTGGTTTACA	12420
GTTGGGTGGA	AACGAAGTCC	ACCTTTGTAT	GGTCCAACAG	CTGAGTTGAA	TTGAACACGG	12480
TAACCACGGT	TTACTTGAAT	TTTTCCATCA	CGGTCAACCC	AAGGAACACG	GAAAGAAACC	12540
ACGCGCTCAG	GCTCAGTAAT	ACGTGCCAAG	ATATTTTCTT	CGATATACTC	AGGGTGTTTT	12600
TCAAATACAG	GTTCTAAAGT	GTTGAAAAAT	TCTTCAACAG	CTTGAGGAA	TTCAGCCTCG	12660
TGCCGG						12666

(2) INFORMATION FOR SEQ ID NO: 138:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 3083 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear



(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 138:

AGCAACTGTT GTGAACCAAT TCCGATAAAT TCCAAGAATT GGTTAATAGA GCCATTTTGA	60
CCAAAAATCC CGATAAAAGC ATAGGCTTTA AGGAGCAAAT TGATCCAGGT AGGAAGGATA	120
ATCAGCATGA GCCAGAGTTG ACGGTGTTTG AGACGGGTCA AAAAGAGGGC CGTCGGATAA	180
CTGATAAGCA GTGCCACAAA GGTCACAATG CCTGCATAAA GCACTGAGTT GAAACTCATT	240
TTAAGATAGG TCAAGTTTGG TGACGCAAAG TAAGATTTGT AATTTTCTAA ACTGAACTGG	300
CCTTCGATGT TGAAAAAGGA TTGACCGAAA ATCAAGACCA AGGGTGCCAA TACAAAGAGC	360
GCAATCCAAA GCATGTAGGG TACTACAAAG AGTTTAGAGC TTGTTTTCTT CATCTCTTTC	420
CTCCTCGATT GCATTGATCA AACCTGCTTC TTGCTCTTCG ATTTCTACGT ACTCCTCAAT	480
ACGAGCATCG AACTCTTCTT CGGTTTCATT GAGACGCATG ATGTGGATGT CTTCTGGTTC	540
AAAGTCCAGA CCGATTTCCT CACCCACGAT AGCCTTACGG GTTGAGTGGA TCATCCATTC	600
ATTTCCAAGT TCGTCATAGG CGATAATTTC ATAATGAACT CCACGGAAAA GCTGGGTATC	660
GACCTTAACT TGGAGCTTGC CTTCTTCAGG AAGGGTAATG CGCAAGTCCT CTGGACGAAT	720
AACGACCTCA ACAGGTTTCA TTGGCTTCAT CCCACCATCA ACCGCTTCAA AGCGTTTGCC	780
GTTAAATTCG ACCAAGTAGT CCTCAATCAT GGTACCTGGC AAGATGTTTG ACTCCCGAT	840
AAAGGTGGCA ACAAAGTGGT TGATTGGCTC ATCGTAGATG TCCACAGGGG TTCCAGACTG	900
GACAATCTCG CCATCATTTCA TAACGAAAAT CCAGTCACTC ATGGCAAGAG CTTCTTCCTG	960
ATCGTGAGTG ACAAAGACAA AGGTAATGCC CAATCGTTGT TGTAATTCAC GCAATTCGTA	1020
CTGCATGTCT GTTCTCAATT TCAAGTCCAG CGCTGATAAA GGCTCGTCCA ACAAGACCAC	1080
ACGGGGTTGG TTGATGATAG CACGGGCGAT GGCCACACGC TGACGTTGTC CTCCAGAAAG	1140
TTTGCGGATG GAACGTTTTT CATAACCTTC CAACTGAACC ATCTTGAGAA CTTCCGCTAC	1200
ACGCTGCTCG ATTTCTTTCT TATCAATTTT ACGCAAGCGA AGTGGAAGG CAACATTTTC	1260
AAACACATTC ATATGTGGGA ACAAGGCATA GGATTGGAAG ACGGTATGTA CGTCGCGCTT	1320
GTTGGTTGGA ATATCATTTA TACGAACACC GTCTAGCATG ATATCTCCTG TCGTCGCATC	1380
CAGTAAACCT GCAATAATGT TTAGGATAGT TGATTTCCCC GAACCAGATG CACCTAGAAG	1440
GGTGTAGAA TTTCCCTTCTT CCAACTCAAA GTTGATGTCT TTGAGAACCT TGGTGTGCT	1500
GTCTTCAAAA ACTTTAGAGA CGTTTTTGAA TTCGATAATT GGCTTTTTC AATTGGCATAA	1560
ATTCCTTCTT TTTCATAGAT TAACCGATCG GGGCTCTGTC AGGTCCCCAC TACCTCTTGC	1620
AGGGAGTAAA ACCACCTGCA TACATCTTCG CTACCGATAG GCTTTCACCC AAGATCCGGA	1680

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CTTCTCTTTC AAGCGTAATA CCTGAGTGTT CCTTGACTTTT TTCGATAACC GATTGGATCA	1740
AGTCCTCGTA GTCTTTGGCC GTTCCATCTG CGACATTGAT CATAAATCCT GCATGCTTTT	1800
CTGACACTTC TACGCCACCG ATACGATAGC CTTTCAAGCC AGCTTCTGAA ATTAAGTGAC	1860
CTGCAAAATG CCCGACTGGA CGCTTAAAGA CCGAGCCACA AGATGGGTAT TCCAAAGGTT	1920
GCTTGAGTTC ACGTAGGTGC GTCAAGCGGT CCATTTCTCTG CTTGATAACC TGATGGGTTC	1980
CTGGAGCTAG GGCAAATTTA ACTGACAAGA CAACTGCACC AGACTCCTGA ATAGCTGAAT	2040
GACGGTAACC AAAAGCCAAG TCTTTAGCAG ACAGGGTTTC GATTTCTCCA TCCTTGGTCA	2100
AGACCTTACA AGACTGCAAG ATGTGAGCAA TCTCGCCACC ATAGGCACCC GCATTCATAA	2160
AGACAGCACC GCCAACGCTT CCTGGAATAC CACAAGCAAA CTCAAAGCCA GTTAAACTAT	2220
GACGGAGGGC AATGCGAGTT GTTCAATCA AGTTAGCCCC AGCTTCTGCT TCAATGGTAT	2280
AGCCATCAAC AGAAACGTTA TTGAGCTTGT CACACAAGAT GACAAATCCA CGAATCCCAC	2340
CATCACGAAC GATGATATTG CTTGCATTGC CAAGAACCAT CCAAGGGATA TTTTCTTGGT	2400
TGGCAAATTT CACAACGCGA GCCAACTCAA AACCATTTCG TGGAAAGACC AAATAATCAG	2460
CCTCTCCACC TACTTTTGTA TAACTATAGC TATGCAAGGG TTCCTTAAAA CGGATATCAA	2520
TTCTTCTTAA GATTTCAGC ATTTTCTCTC TTACAGACAT GTCACCTCTC CTTTACAAA	2580
ATTCATTCCA TTATACCATT TTTAGAGACA TTTGACGACC ATAAAAATAC CTTGTTTGGG	2640
TTTTGCATAA GAAAAAGAGG TTCCCCCTT TTTATGATTT TTTACAAAAG ATTTCTTGG	2700
TTCCATAGGC GACCAGAACG AGCTCCAGTG CTAGAATCAC TTCAACCAAG ACTGGATTG	2760
TCAACCAGCC TACTTGAAA AGAGATGGTG CCAGATCAAA GAAGGCATGC AAGCCATAGG	2820
CTGCTAGGAG ATAAATCCAT TTCTTCTGGC GAACAGCTTG GTAAACCCAA ACTGTCAAAA	2880
GTAATTGGAA ACCAAGCGCC AAGATTGCT CAAAACCAAG CAAATAAATC TGCCAGACCG	2940
AAAGTGACTG AATGGTTTTT AACATATTTT CAGACAGTAA TTGCATAACC TGTGGATTC	3000
GAGTTTGAAC TGCCGAAAGA ACAATGTAAA GATTGAGTAA ACTAGTAAGG CCTAGAAAAA	3060
TCAACTCCAA GCCACCATGC CCC	3083

(2) INFORMATION FOR SEQ ID NO: 139:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 15363 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 139:

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CCGGAGGATA TTGACCACCA CCAAAGCAG GGGGAAAATC GAAATCAACC AATAGTAGGC	60
TACTGCGACA CTGGTCAACT CACTATCTGA TGCTTGATAA TAATGCAAAA AAGCTTTTAA	120
TAAAGGTTTG TCTATCAGCT CTTTCCACCA CTTTTCATG TCATACTCCT TCACTTATAA	180
TCTTATACTC AATGAAAATC AAAGAGCAAA CTAGAAAGCT AGCCGCAAGC TGCTCAAAAC	240
ACTGTTTTGA GGTGTAGAT AAGACTGACG AAGTCGATCA CATACATACG GTAAGGCGAC	300
GCTGACGTGG TTTGAAGAGA TTTTCGAAGA GTATTAACTA ATTTCTTCTT ACCAATTCCA	360
CCATATCATA CGGTAGGGTA TTGGCAGCTT CCTTCAAGGA ATAGTTCTCT AAGTTATTTA	420
CATTTTGTGC TAATTTCTTG GCATACTTAG TCGTAATCAA TCGTTTTTCT TCGTATTCGA	480
AAATCAACTT GCGCTCCAGA TAATAGCCTC TCAGCATTTT ATCGATATTG TTGGGTTTGA	540
CACGATTGAT AACCCGTCG ACAAGGCAC CACTGCTGAT AATAGCTGTT TCTCGAAGAC	600
GAGACTCCTG CATAAACTA ATCAAAGAGC GTCTGTAGAC TCCCTTCAGG TTTTCCAAAC	660
TTTCAATAAT CATCTCTGTA TTGGCAAGAT AGAGCTCTGC AATTTGGTCA TAATCAAGAG	720
CACGGAGACG GCTTTGCTCC TTGTTCTTCC AGCTACGGAA GGTCTTCCG AGAGTAAAAA	780
CTTCATGAAG GAGAAAACGT AAAATCCTCA AGGAAACAAG AAAATAATAG GTCAGTCTTG	840
AGGCAAGTTT ACGATTGATT CCTTGTTCTA TATTTTTCAG ATAACGTTGG TAAACTCGGT	900
AAGCACGATT GCTAATGTTT CCCTCTTCAT AGGCCTGTTT CAAACCATCA CTTTCAATAC	960
TAAGAATCAA GAGTTTCAAA GCAGCCAGT CTTCTTGATC ATCCTGGTTT TCTTGGCTTA	1020
AAATGAGATT TTCAATACGT CCATGATAAT TGTCAATAGC CGCATAGAGG GGAAGTTTAT	1080
TTCTGGTGTC TTCCAACCTT TTTTCCAACCT TAGCGTTAC TTCATTCAAA ATGGCGATAT	1140
GCATAAGATA ATCCTTGCTT TCTTCCTCTT CATCAGAAAG ATGAGGCAAG ACCAAGAGAC	1200
CTGTTAAAAA GCTAACAGC GTCACACCTG CAACAAGGAA AAGCAAAAGA GGATACTCCT	1260
GTTCTAGATT ACTTGGTATC AAGAGAATCG TAGCAATCGA CACCGTTCCC TTAACACCTG	1320
AAAAGGTCAA GAGAAACATG TCCTTCATAT ACTTATTTAG CTTTTTCTTG AGGCGTCGGG	1380
TTCTATAGGC ATAATAGCCA TAGATCATAA TAAAACGAAT GACAAAAAGG ACAAAGGTAA	1440
GGGCGATAAG AGATAGCAAT AAAAGTAGAG GATTATAGAT TGGATTGGTC AAGATAGGTT	1500
CTGCTATCAT TTCCAACCTC ATCCCTAAAA TCACAAAGAC AGAACCGTTG AGCATAAAGG	1560
TCACTGTATG CCAGACCGTC TCGGTCACCG TATCCACTTG GGCTTCGAGG AGCGTGATTT	1620
TCTTGAAGCG ACTTGCTTTT AAAATTCCAG CAACTACGAC GGCAATAATA CCTGAAACAT	1680
GAACTTCTTC TGCCAGAAAG AAGGTCACTA GAGGCAAACT CAATTCTAAT AAAAGTTCAC	1740

932					
TGGCAATATC	CGTTGCGCGC	ACACTTAGCA	AGAAGGTATG	GAGGAAGCGG	TTGGTCATGG 1800
CTGTTAAAAA	TCCAATTAAA	AAACCGCCTA	GGATTGAAAA	GATGAGCGAA	CTGCTAGCTT 1860
GCCCCAGAGA	AAAAGCTCCA	GTGTGCCAAG	CTGTCAAAGC	TACCTGAAAA	GCCACCAAAC 1920
CAGAAGCATC	ATTCAAGAGT	CCTTCGCCCT	TAAGAATATT	GGACACGCGC	TTAGGAAAGC 1980
TAAAACGCTC	CGAAAGAGAG	GCAAAGGCCA	CCAAGTCCGT	AGGACCAAGG	GCTGCCCCAA 2040
CAGCCAAGCA	AGCTGCCAAG	GGAAGGCTGA	ACCAAAGAAG	ATGGGCCAAG	CCACCCAAAC 2100
TCAGGGTCGA	GATAAAAAATC	ACTGGAAATA	TGAGATAAAC	AATGATTTCG	CAGTGTTTTA 2160
AAATAGCCGT	AACATCTGCT	TCTTCAGCCT	CTCGGAAAAG	CAAGGGTCCG	ATAACCACTG 2220
CCAAAAACAA	CTCCGTATTA	AGGTGAAAGT	CAGTATTGGG	TAAAAAGAGA	CCAATCACAA 2280
TTCCCAAAAG	AATTTGCACC	AAAGGGAGAG	GCAAAAAGGG	CAGGAGCTTA	TTGGTTGTAC 2340
TTGAGACAAT	CAAAACCAGT	AAAAATAGGA	TGAGGTAAAT	CAGTAATTCC	ACGCACGTCC 2400
TCCTTAATCT	TTTTTACAAC	AGGATTCAAA	TATCTCCTTC	TGCTCTTTGA	TTTTTTGGTC 2460
AATCTTGGA	CAGTCTTTGT	GCTCAATTTT	TCTCTGGCAC	CGTTCCATTT	CAAGAGCAAC 2520
TAATTTTTC	TTGATTTTAA	GCATTTTTTT	GCTCATATGC	GCTTGGTCTA	GCACGCCCAT 2580
CGCTCGTTCG	TGGTGGGTTG	ATTCAACAAA	ATTCTGGCGC	ATGGCATCCA	GCTTTTCGTG 2640
TAAGTATTGT	TTATCCATGT	CTGTATCTCT	CTAATTTTTC	AATCATCACT	AAAAACGGCG 2700
GGTTGTGTAC	TTGGTTTAAA	GTTCCGTAAA	TGGCAGCTGT	GTAATCTTGT	TGGTTCAACT 2760
GGATCACAAA	ATCCAAGACA	GCATCTCTCT	CGAGATCGCC	TCCTTCATGA	CCATAGTAAA 2820
TCATAATAGC	AATTCGTCCA	CCTTTGACAA	GTAAGCCACA	TAGCTTTTCT	AATGCCCTCA 2880
TCGTTGTCTG	CGGTCGGGTG	ATGACAGACT	TATCAGCTGC	CGGCAAATAG	CCCAGATTAA 2940
AAATCCCTGC	CTTAGCTTTT	ATCACAAACT	GGTCCAGTGT	CTCATGGCCT	TGCAAGATTA 3000
ACTGGGCATT	TGTCAAGTCA	GCCTGATGCA	AACGCTCTTG	GGTCTTTTCC	AAGGCTTGCT 3060
TCTGAATATC	AAAGGCATAG	ACTTGCTTGG	CTAGCTTGGC	TAAAAAAAGC	GTGTCATGAC 3120
CATTTCCCAT	AGTCGCATCC	ACTACGACAT	CCTCTTTTGT	CACGACCTCA	GCCAAAAAAT 3180
CATGTGCCAT	CTCAAGTGGT	CTTTTCATTT	TCAAATCCT	GTTTTACAGC	CTTGCATCCT 3240
TGAACACTTC	CACGACGTCG	CATCTCCATC	TCAATGCTGT	TGAGGACTTC	CCATTTATTG 3300
AGGCTCCACA	TAGGACCAAG	CAGCATATCC	CTAGGCGCAT	CTCCTGTAAT	TCGATGGATG 3360
ACGATATGTT	TGGGAATAAT	TTCCAGTTGG	TCACAGATGA	CCCTGACATA	TTCGTCCTGA 3420
CTCATCAATT	GTAACGCCCC	CTCATGGTAA	TCTCGTTGCA	TACGAGTATT	TGTCATAAGA 3480
TGGAGCAAA	GCAGTTTAAT	CCCTTGAATA	TCGTTATCCG	TGACACAACG	GCGGACATTT 3540

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TCAACCATCA	TCTCATGGGT	TTCACCAGGC	AAACCATTGA	TCAAATGGGA	AACAATCTCA	3600
ATTTTGTGGAT	ACTTCTCTCAA	ACGCTTGACC	GTTTCCACCT	ACAATTCATA	AGAATGCGCA	3660
CGGTTAATCA	GGTCAGAGGT	TGCTTCATAA	GTAGTTTGCA	AGCCCAATTC	AACCGTCACA	3720
TGCATGCACT	CCGATAACTC	AGCCAAATAT	TCGATGGTTT	CGTCTGGTAA	ACAGTCTGGG	3780
CGCGTTCCAA	TATTGATTCC	TACCACACCT	GGCTCATTGA	TAGCCTGTTC	ATAACGCTCT	3840
CGAATAACTT	CCACCTTTTC	ATGGGTGTTG	GTAAATTTT	GAAAATAAAC	CAGATACTTC	3900
CGAACATCCG	GCCACTTGCG	GTGCATAAAG	TCAATTTCCT	TATAAAATTG	CTCACGGATA	3960
GGCGCATCCG	GTGCCACAAT	GGCATCTCCA	GAACCAGAAA	CCGTACAAAA	AGTACAGCCC	4020
CCATGAGCCA	CAGTCCCATC	ACGATTGGGA	CAATCAAATC	CCGCATCAAT	AGGGACTTTA	4080
AAAGTCTTTT	CTCCAAAGAG	TTTTCGATAA	TAATCATTC	AGGTATTATA	AGATTTCATG	4140
ACTTTCATTA	TAACAAAAAT	CACCCACAAT	CTCAAAAGCC	TGACTTTCCT	ATAAATTCCT	4200
CTGTTTCTCG	TTTCCATTAG	CCTTTTMTTA	TGATACAATA	TGGGTATGAT	TTTAATGAAA	4260
TTAGCATCTA	TTTTATTATT	GATACTGACC	TTAGTCGTCT	GCATTATCCT	AACCAAACTT	4320
TTTAGATTAA	AAAACTAGG	ACGAACTTT	GCGGATTGG	CTTTTCCAGT	CTTGGTATTT	4380
GAGTATTACT	TGATTACAGC	TAAAACCTTT	ACCCATAATT	TCCTCCCTAG	ACTGGGGCTA	4440
GCCCTCTCGA	TCCTAGCCAT	TATTCTCGTC	TTTTTCTTCC	TTTTGAAAAA	ACGCAGCTTT	4500
TACTACCCTA	AATTTATCAA	ATTCTTCTGG	CGTGCAGGAT	TCTTATTAAC	CCTTATCATG	4560
TATATAGAAA	TGATTGTTGA	ATTGTTCTTA	ATGAAATAGT	CGAATCCCTA	AGCATTTTCT	4620
AGGGATTTTT	GCTTCTCTA	CAAAATAGTA	TAGACAATAA	CACATATACAA	TTTTATACAA	4680
AGAAAAGAGT	CTGGGACAAT	AGTCTCTTAT	ATCCAAAAAG	GCAACGGATT	TGCCGTTGCT	4740
TTTTTGGATG	GTTACGATAG	TCTTGGTAAA	ATAGAATTGC	CCAATAAACC	ATTTAGAAAG	4800
GCTATCCCAT	GCATATTCAC	TATAACACAA	ATCAAACAAC	TTTACCACTA	GAAATCAGTT	4860
CCTTCTTACC	ACAAGATCAT	CTCGTTTTTA	CTATTGAAAA	AGTGGTGAAT	ACCTTGAGAG	4920
AACGTCACCT	CTACACCTCC	TATCATGCCT	TTGATCGCCC	GTCTTATCAC	CCTAAAATGC	4980
TTGTATCTAC	TCTTCTATTT	GCCTATTCAC	AAGGGATTTT	CTCTGGTCGA	AAAATTGAAA	5040
AATGGAAGAG	TTAGTGACCT	TAGATTGTTT	GTTTATTGAC	AGAACTAAGA	TTGAAGCCAA	5100
TGCCAACAAG	TATAGTTTTG	TGTGGAAGAA	AACGACAGAG	AAATTCTCCG	CCAAACTTCA	5160
AGAACAGATA	CAGGTCTATT	TTCAAGAAGA	AATCACTCCC	CTTCTGATTA	AATATGCCAT	5220
GTTTGATAAG	AAACAAAAGA	GAGGGTATAA	AGAGTCAGCT	AAAAACTTAG	CGAATTGGCA	5280

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CTATAATGAC	AAGGAGGATA	GCTACACACA	TCCTGATGGC	TGGTATTATC	GTTTTACCA	5340
TACCAAATAT	CAGAAAACAC	AGACAGACTT	TCAACAAGAA	ATCAAGGTTT	ACTACGCCGA	5400
CGAACCTGAA	TCAGCCCCCTC	AAAAGGGACT	GTATATGAAC	GAACGCTATC	AAAACCTGAA	5460
AGCTAAAGAA	TGTCAGGCGC	TTTTATCTCC	CCAAGGTAGA	CAGATTTTCG	CTCAACGCAA	5520
GATTGATGTG	GAACCTGTCT	TTGGGCAGAT	AAAGGCTTCT	TTGGGTAC	AGAGATGTAA	5580
TCTGAGAGGG	AAGCGTCAAG	TGAGAATTGA	CATGGGATTG	GTACTTATGG	CCAATAACCT	5640
CCTAAAATAT	AGTAAAATGA	AATAAGAACA	GGACAAATCG	ATAAGGACAA	TCAAATCGAT	5700
TTCTAACAAT	GTTTTAGAAG	TAAAAGTGTA	CTATTCTAGT	TTCAATCTAC	TATACAATAA	5760
GAGAAAGACT	CAAAATTAAA	AAGCTAGAGT	TCCACAATTG	GAAATATCTA	GCTTTTTTGT	5820
GGTTGAGAAC	TATTTTGTCT	CAGGCTCTTT	ATCTTCTATT	TAGGACAAGA	GTTTTTCTTT	5880
GGTCTTTAAT	GATAAAGAAG	GTATCAAAAT	TTCTAGTCTT	CTTTTTTACC	TTTAGTAACT	5940
ACTAATCCTG	CACTCAAACC	TAGAAGAGTT	AAACCTGCTG	CTACTGCTGC	TTGGCTTGCC	6000
GCACTACCTG	TACTTGGTAA	CTGGGCTTTA	TTAGTTTGAC	TAGCTTCACT	TGAATCAATT	6060
GGTTTTGTAT	CTGCTTTTTC	TGACACTTGT	GGTTTTTTAG	CTTCTTGAGC	TACTGGTTTG	6120
GTTCCAACCA	AGACGATGCG	GTCTGTCCGA	ACTTCTACCA	CTTCACGGAG	TTTTTCTTCC	6180
TTACTTCCAT	CAGGATTAAT	CGCTGTAAAG	ATACGTCTTT	TTCCAACCTT	TCCTTCTTGT	6240
TCTACACGAG	TTTCACCTAG	ATACAGTGTT	GAATCTTTTT	TCTCAACTGT	CTTGTATGCC	6300
AAATCTTTTT	CAACAAATTC	GATTTTTTGA	AGATCTTCTT	GTACAGCAGC	AACTGTCTTC	6360
TCAGAAACTG	GTTTTTCCTT	AGTCAAGTGG	ATACGGTATT	CCTTGACTTG	TTTTCCACTT	6420
TCTGAAACGA	GGCGAACAAG	TACTGGAAG	CTATCTTCTC	CACTATCTAC	CACAGTTGAA	6480
GCTACTTGAT	TGTTTTCTTC	AACTGAGACT	TTTGCCGTT	GACCTTTATA	GGTAATTGGA	6540
TAGTCTTGAC	GATTTTCAGC	GAAATCAGCA	AGTTCTTTTC	CATCTACAAG	AATCTTTGAT	6600
TGAGTGCTTT	CTTGAGGCAA	TTCACTTGGT	GCAAGGAAGG	TCATCTCAAT	CATCGCAACA	6660
CCGCTCTTAT	CTGCTTTACG	CTCCATACGC	CATCTCATAG	CTTTGGCTTT	GATAGCTTTA	6720
AATGTTACGT	TGATTTTCATC	ACCAGCTGCA	ATGTCTTTAT	CCGCACGATA	AGGAACAGCT	6780
TCCCAATTTT	CTGGATTGTT	GAATGGATGG	TCTGCGTCGT	AGGCTTGGTA	GTTTGAATAG	6840
TAGGTTGGCA	CTTCAAACCTC	TGGACCGACA	TAGCGTTCTA	AAACGACTTT	AGATGGTGCA	6900
TCCGTACCAC	TATCTGCAAA	GAACGTGAAC	TTTCTTGTG	TAACAGTCCG	TTCTACAATC	6960
TTACCATTTT	CACGGAAAAT	CACACCCGCT	GATACTTCTG	GATTAGAAGA	TGGTGTGGT	7020
GACCAGTTTG	TCCAACGACG	ATTTTCTGAA	TGATCTCCGT	CATTGAGATA	GTCAACGCGG	7080

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TCATGAGAGT	TTTTGTCAAT	ATCATTGGTT	GCTGAAGCAA	AGGCCTGGTT	ACTGTTTTC	7140
TCATAGTTAG	GGTTATCTGA	AAGAGTCTCA	CCAAGTTTGT	CTGTCACTCG	TACAGTGATC	7200
TCAGCAACAA	GGTTACTACC	AAGGACACGG	CCTCGAACAG	TAAATTGACC	TGCTTTTGTC	7260
AGATTTTCCG	CTGGAAC TTC	TTCCCATTC	ACTGTCAGGT	CTTTTGTTTC	GTAGCCGTCT	7320
TTACCTGTGA	AGTAAACTGG	AACCTTAGTC	GGCAATTCAA	GTGCTTGACC	TACTTGTAGC	7380
AAGCGAGCTT	GTTTAACCGC	AGCAACTGGT	TTATGAGAAA	GTAAGCTCTT	ATCCTTAGTG	7440
AAGTGCAGAC	GGTATTCTCC	TAAGATGTCG	CCATTTCAG	CTTTCGCGAT	GACACGAAC	7500
GGCTCACCTT	CACGAACGCT	TGGAACGACG	GTAGCGAGAC	CATTGTTGCT	AACACTTGCT	7560
GTGACTGCCG	GAAC TTTTCC	ATCTACAGAC	TCAAGGTAGT	AGTCTGTCAA	ATCAGGGTTG	7620
AAGTTTGCTA	AGTCTTTGCC	GTCAACTTGG	ATTCTTGTTT	GTCTTGCTT	GGCTGCCGCA	7680
ACTTGTTTCG	CAAAGATTG	TACCTCTGTG	ATAGACGTTT	CACGCTTGTT	ATCTGCTTTA	7740
ACCATGCGAA	TACGAACAGC	ATAGGTTTCA	ACTTTATCAA	AGCTAAAGTG	GTTTATTTCT	7800
CCAGCCTTGA	GTTGAGCAGG	GGCTTTTAGA	TTAGTAAC TG	GTTTCCAGTT	GGCAGAATCA	7860
TTAAAGACAT	GGTCTCAT	ACCAACAAAA	CTAGGGTTT	TAGGAGCTGT	TGGGACAGTC	7920
TTACCAACAT	AATACTCAAT	CACATAAGAC	TTCGGTACAC	CAACTCCATG	GTC TTCATGG	7980
AATCCGACAC	TTAGATTATC	AACGGAGCGT	TTGCTCAAGA	TACCTGAATC	TCCAAACAGA	8040
ACACCGACTG	AAGCTTCTGG	ATTAGTACGA	TTCCAGTTTG	TCCAACGATT	GGCTGGTTGG	8100
TTATGTAGG	AAATGAGCTT	GTCATTAAAC	TTTGAAACTG	GGTCGCTTGG	ATTTGAGTCT	8160
GAAGCAAAGG	CAAGTGGCAA	TTCTGAACCG	GTCCATTGGT	CAGAAATGTT	TGCACCTTGC	8220
TCAGTTTGAG	CAGATACGCG	AACATGAAGT	TTAGTTGTTA	ATTGCGTACC	TTCTAAGCGA	8280
CCATTAACTG	TAAAGACACC	TTCTTAGCG	TATTGCTCTG	GACGAATCGC	ATCCCATGCA	8340
ACCTTAGCTG	ATGAAACGTG	ACCATTTGAA	TCATATGTCC	GAACACTTTC	TGGTAATTGT	8400
GGTGCTTCTG	CGATTGGAGT	TGTCACACTG	ACTTCTTCAA	CTGAAACGAT	ACCTTCTACA	8460
GAGACTTTTG	CACGCGCTTC	AAGGTCAATT	CCTTCAACTT	TACCTAGTAC	TTCAAATGTT	8520
TGATAGGAGT	CTAGTTTTC	TTTCGGAATA	GCTTGCCAAG	TGACTTTATG	AGTTT TAGGG	8580
AAACCTTTGT	CATACTCAAC	TGTTACTGTT	GCTGGAAGAC	TTGGTTCCTG	ATGCAAATCT	8640
GTCACTACAT	TTACAGGACG	GATGGATTGC	GCAATCTTCT	TCTCAGTATT	GGCTTGATA	8700
GTGAGTTCAA	CTTGGTCTTT	AGCTCCCTCA	TATTCAGCGT	TCAGAGTGAC	TGCTCCTGGC	8760
TTATGCAACT	CAAGCATTCC	TTTACGAATT	GCGACTTCCC	CTTCACCACT	TGTAGAGAAG	8820

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GTACTTTTAT	CAGCTGGTAA	TACAGCTTGC	GTTCATCTT	GATAGTGAGC	TCGAACCGAC	8880
AATTTGACAG	TTTGGTCTTC	TTTGAGACTG	TCAGCTTTT	CCACTTGCAA	GCTCAAGTGA	8940
GCAATTTTGT	GCGCTTCTTC	AAGGAATTGA	ATTGCATAGG	TTTGAAGAGG	GCCACCATCT	9000
TTAGGCTGAA	TAAAGATGCT	CGCACGCATG	CCGTTTGCTG	CGCTTGCTTG	AAGAACTGTA	9060
ACAGCTGCAT	TTTTAGCACT	TGCTGTGACT	TCTGGCAACT	TAGCTCCATA	AGCAAGAGTG	9120
CGGTATTGCA	TTGGTTTTTG	ACTAGTAAGA	CCTGTACTAG	CCTCACCACC	AACCGTTACA	9180
GTGGTACTG	CAGGTGCCGC	AGGATTGCCT	TCTTCTACCA	CAAGGGTTGC	ATGAATTGGT	9240
TGACCTTCTA	AATAACCGGT	CGCTTGAATA	CGAGAACCTG	GAATTGCTAA	CTTAGCTTTA	9300
TCTTCTTCGG	CAATCTCCCA	CTTGTCCACT	TCATACTCTT	CAACACTTCC	ATCAATCAAA	9360
ACATAGGAAA	CAGATTTGTC	TACAGAATTC	AAGTCAGTAT	TTGGAGCAAT	ACGTTTCACA	9420
ACTGGTAGCT	CTGATTTAAG	AGCAATCACT	TCTACACGAG	CTTCTACTTC	TCGTCCGTCA	9480
GCCATACCTT	TCACCGTTAC	AATACCAGGC	TTGCTCACAT	CTACTGAAGA	CCAGGTTACA	9540
GGACGTTCTG	CACGGCTACC	ATCACTGTAT	ACAAACGGAA	CAGTGGTAGG	CATTTACAGT	9600
GCCTCTCCAA	TAATGGTCTG	TACTTTTGGC	ACTTCTGTCC	CCAAAACAGT	CTTCTCTTGT	9660
CCTTCTTTCT	TACCACTAAA	GACAGTGACT	TGGTTCGATT	TCAAGAGATC	AGAGTGGGCA	9720
GTCAGGGTGA	ATTTCCCTGC	TTGTTCAGTT	GATTTGACAA	TGGCAACACC	TTTACCATTA	9780
AATGCTTTAC	GAATCCAAGA	ACCATCTGCT	TGCGCCTTAT	AGCGTTCACG	GCTGGCTTGT	9840
TCTCCGTAT	CTACACCGAC	CAGTTGACCT	TGGCCATGCA	ATTGGAAGCG	AACCAGATTA	9900
TTAGCAGTTG	GAACCACATT	CCCCTGGCTG	TCAACAATTT	CATAGTAGAT	GTAAGTCAAG	9960
TCTTTTCCAT	CTGCTGCAAT	CGCATGGTCT	TCCTTAATAA	GACGAAGTGC	CGCTGGCTTA	10020
CCAGCAGTCG	TAATCTTATC	TCGAGCAATT	TCCTTGCCAG	ATTCATCACG	AGCAATTGCT	10080
TCCAAGGTAC	CTGGTTGATA	GGCAACTTTC	CATTCAAGAT	AAAGTTCATT	AGCATTTGCA	10140
CCTTCTTGGT	AAGTCCGCCC	ATCGCTGGTT	TGTTTTTTAT	TGAAAGTCTT	AAGACCAAGA	10200
GATTTTCCAT	TCAAGAACAA	TTCTACACTA	GAAGCATTCG	AATAAGCACG	AACTGGAATC	10260
TTACCTTCTG	AGTCAGCTAC	TTTGATGCT	AATTCTTTGT	TTTCCCAGTT	CCAGTGAGGA	10320
AGAAGGTGTA	CCATCGGTTT	CTTCTTAACA	GAAACCCATT	GGCTTTGGTA	GAGATAGAAG	10380
TCATGTTTTG	GAATGCCGGC	TGTATCTACG	ATACCAAAGT	AAGAGCTCTT	AACAGGAGTT	10440
TGATTTTGGT	TGTGCCATGG	TGTAGGTTCA	CCAATATAGT	CCGTACCTGT	CCAGATAAAC	10500
TGTCCAGCAT	AGCCAGCGTT	GTCACGGTCA	AAAGTCCATG	AAGCGGTTGC	TGTTTTCCCC	10560
CAACCCACAC	GATCATTTCC	ATAATCTGAC	TGTTTATAAT	TACGCTCAGG	TCCATTGCTA	10620



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TGTTTCAATT	CACGPTCAGG	GCGATAGTAA	CTTCCACGTG	TACGGGTAGC	TGAAGATGTT	10680
TCTGATCCAT	AAATCAACCA	TTTTGGATGC	TTAGCTCTAA	GGGCTTTGTA	ATTATCTTCA	10740
GAATAGTTAA	ATCCAACAGC	ATCGAGTTCA	TCAGCAATTT	TCTCATGCCC	TCCGCTACCA	10800
TTACCGAAAC	GGAATTTATC	TGCTCCCATG	GTAACATAGC	GAGTCTTATC	AACATCCTTG	10860
ATAACCTTAA	CCAAACGTTT	AACAGTTGCT	AAAGAGTGGG	CATCACCATT	AGCTTCACCT	10920
ATTTCAATTAC	CAATTGACCA	CATGAAGATA	GCAGGGTTGT	TTTTGCCTCT	TTCGACCATG	10980
GTACGTAGGT	CAAAATCAGA	CCATTTTTC	CCTTTTCGAG	CTTCTGGGTG	AGTGGCATCT	11040
TTTTCAAAGA	AACGTCCATA	GTCATAAGGT	TTCTTGCCAC	CATACCACGT	ATCAAAGGCC	11100
TCTTCCTGAA	CGAGTAAACC	TAGTTCTGCT	GCGATTTGCA	AGGTTTGCTC	ACTAGCAGGG	11160
TTGTGGGTTG	TACGGATGGA	GTTAACTCCC	ATCTCCTTCA	TTTGTGTTGAG	ACGGCGATAT	11220
TCTGCTTTAT	AGTTTTCTTC	TGCTCCAAGC	GCCCCATGGT	CGTGGTGCAA	GGATACTCCA	11280
TGGAATTTAA	TACGTTTACC	ATTCAAAGAG	AAACCTTCAT	TTGGAGTCCA	GTGATAGTAA	11340
CGGTAACCAA	ACAAATCCTT	CTTAGCATCA	ACCAATTGAC	CGTCACGGTA	AACACGCGTA	11400
ATCAATTCGT	ACAAGGCAGG	TTTGTCAATTT	AAAACAGTCC	AGAGTTTGG	TCCTTCAACT	11460
TCTAAAATCG	CATCTAGGCT	TGTTGATTCA	TGTGCTTTTA	AGGTACGACT	CGCTGTACGA	11520
ACTAAGCCTG	TTACAGCATG	ACCACCTCGT	TCAACGATTT	GATATTCGGC	TACAAGTTCA	11580
TGGTCTTTGT	CGTCCGTATT	GACGATTTTG	CTGGTCACAT	GAGTTTCAAC	CTTGCCATGT	11640
TGTTGTTCTT	CAAGTTTGG	TGTTAAAATA	GTTGTCCTT	TTTCTCAAC	ATGCACCTTA	11700
TCTGTCACCT	GTAAAGTCAC	ATCACGATAG	ATACCACTTC	CTGAATACCA	ACGGCTACTT	11760
GGCTGTTTGT	TGACTGCATG	GACAGCAATC	ACATCTCAC	GACCATCTTT	TTGAAGGTAT	11820
TTGGTGATAT	CATATGAGAA	CTGGTTATAA	CCATTTGGAT	AATGCCCCAC	TAAGTGACCA	11880
TTGACATAAA	CTTGAGAATC	CATGTAGACG	CCATCAAAAG	TAAGGCGAAC	ATTTTCTTTG	11940
AGGTCTTTTT	CATCTAGTTT	GAAAGTCTTG	CGATACCAAG	CTTCCCCACC	GTTGAGCTGT	12000
CCACCTTCAT	TTTGTGCAGG	AGATTCATGA	TCGAAATCGT	TAAAGATACT	CCAGTCATAC	12060
GGTAAATCTA	ATTTTTCCTA	CGTAGATACG	TCTGCATCAG	GTTTAATGGC	TTCTTAGATA	12120
TTTGCATTGA	GTTTAAAGTA	CCAATTTTGA	TTAAAATCCA	CTTTCCTGTC	TTCAATCATT	12180
TGATTCACCT	CTTCATTTGT	TACAGCTTTA	GCATCTTCCT	TGAGCGGTTT	TTCTTGATTT	12240
GAAGCTTGTG	ATTCTATCCT	TGGAGCTTTT	TCTTCCGGTT	TAGCAGACAC	TTTTTCCTCT	12300
TTTGGAGTTA	CGGCTTCATC	TTCTTCTTTC	TCAGATGCAA	TAGCCTCAGT	TGAACTAGGT	12360

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TCACCTTGTT	CTGTCCTTTC	AACTATATTT	TTAGTTTCCA	AAGCTTTATC	AGCCTTTTCT	12420
TCTACTATCA	TTTTTTCCTC	TTTAGGTTTC	TCAGCAGTAT	GAGTAATAAG	TGTTTCATCC	12480
GCATAAACTA	CAGATTCTCC	AGCTATATTT	CCTCCTAATA	AAACTGCACA	AGTCCCAATC	12540
ATTACTGAGC	AAGCTCCAC	AGCAAACCTA	CGAATGCTAT	AAACTCTTTT	CCGATTCCAA	12600
TGGCCTTTCC	CCATAAAACC	CTCCTTATAT	TATATTTAGT	GCAGTTAGCT	ACTACCAAAG	12660
CCCAAGTGGT	ATACATGGTA	TGACAACCTA	GTTTCAACAA	TTTACACTCT	GCGAAAATCC	12720
AATTCAAACT	TCGTCAGTGT	CGCCTTGCCG	TAGATATGAT	TACTGACTTC	GTCAGTTTCA	12780
TCTACAACCT	CAAAACCATG	TTTTGAGCTG	ACTTCGTCAG	TTTCATCTAC	AACCTCAAAA	12840
CCATGTTTTG	AGCTGACTTC	GTCAGTTTCA	TCTACAACCT	CAAAACCATG	TTTTGAGCTG	12900
ACTTCGTCAG	TCTTATCTAC	AACCTCAAAA	CTGTGTTTTG	AGCAACCTGC	GGCTAGCTTC	12960
CTAGTTTGCT	CTTTGATTTT	CATTGAGTTT	ATATTTTATA	GGAGCGCATT	ATTTTGCTTT	13020
TGCTGCGTAC	TCTTCGTTAC	GTTTGATCAT	TTGTTTTCTG	TACCAAGCAA	AGATACCGAT	13080
ATAGAATACA	AGGAAGACTA	CTGCACCAAG	GATTGCTTTG	ATATCACCAG	TTGTAGTGTT	13140
ACCAATTGTC	CAACCAAGAA	GTTTTTCGAT	TGGTCCTTCA	AGAGTAGAGT	GAGTAATCAA	13200
TTGAGTTTGG	CTCACACCTT	CTGGGAAGGC	ACCTACACCT	TTAGCAAGTT	CTGTTGCAAA	13260
TGGTGCAATA	AGTGTAACCTG	AAAGAAGGAA	GAGTGGCAAC	AAGAGTGTTT	CGAAGATAAT	13320
CATACGGAGC	AATTTACCAC	GAGTTACAAC	CAAGAGAGCT	GGAGTAACAC	CCATAGCGAT	13380
GATACCTGCA	AGTGCAAGA	TACCATTTCC	AACTTTTGAA	AGAAGCACTG	CTTCAATCAA	13440
CATGATTGGT	GCAAGTACGT	TGGCACAAGC	CCAGATTTCA	GCACGACCAG	CGATGAATGG	13500
CCAGTCAAGA	CCGATATTGA	ATTTACGTCC	TTGAAGACGT	TTAGTAGCAA	CGTTTGTAAT	13560
ACCTTG TGAT	AGTGGTTCTA	CGGCTGCGAT	GAACCATGAA	CCGATAAGTG	AGAAGAGTTC	13620
CAAAGATACA	CCGGCAGTCA	AACCAAGAGA	CAACCATCCT	TTGATAACAA	GACGCCATTT	13680
ATCTGCATCT	GCAACACCTG	CAATTGGATG	TGGAGTTCCC	ATAATACCGA	TAACGATACC	13740
AAGGATGAAA	CCGATGAAGA	ATTTAGATCC	CCAGAAACCG	ATTTTCTTGT	TCAATTTAGC	13800
AGCATCAAAG	TCATATTTAT	CAAGGCCTGG	GAAGAATTTT	TCAAAAATCT	TATCCAAAAC	13860
CATGATAACT	GGGTTCATCA	TGTAGTTCAT	GTGAGTTGAT	GTCATTGGTG	ATGAACTTGG	13920
GGCGTTAAGA	AGGTCATCAA	ATGTAGGTTT	CATCAAGTCA	GAGTTGATAA	TTTTCAACAC	13980
ACCGACAAGG	ACGATAGCTG	CTGTAGCAAT	AAAGAGTGAA	ACCCCTTGAC	TCACACCATT	14040
GTTATCAGCA	TACCATTTAA	TCAAGAGACC	TGTGATAGAC	AAGTGCCAGA	TATCAAAGAT	14100
ATCGACATCA	AGTGTATCTG	TTTTCTTCAT	AGCTAGCATC	ACTATGTTGA	CAATCAACAT	14160

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GATGAGCAAG AAGTATAGTG TCCAAGCAGA ACCCCAAGTG ATTGTAGCAA GTGGTGCCCA	14220
ACCAACGTCG GTAATACTCA ATTGGATACC AGTGTTTTC ACGAATTTTG CTAGTGATGC	14280
TGAGAAAGCA GTGTTTAGCA TACCGATGAT AGCACCGATA CCTGTAAGAG CGATGGCAAG	14340
TTTGATACCA CCTTCAAGCG CTTTGGAGAA TTTCACTCCA AAAAGTAAAG CCAATACTGT	14400
CAAAATGATT AACATGATGA CAGGTCCACC CATTCTAAG ATGGGATTGA AAACCTTTC	14460
GATTAGGTCA AAGATTGCAT CCATAACAGT TCCTCCCTTT TTGATGTTAT ATGAATGTTA	14520
ACAAATTAGA ATTAGCTTAA TCCGTGTTCT TTAATAGCTG CTTCAATATT GTCAAATACT	14580
GGAGCGCTCA TTGCTGGGAT ACGGAATAAG ATTGGCCCAG CTTGATAAC TGGGATACCT	14640
GGTTCAAAAC CAAGGTCTGT TGCAGCGATT GGTGTAAAGA TATCGTAACC TTTCATAAGG	14700
TCTTCGTTTA CATCTTTCAC CATGACTGCA TCACAGTGAA CATCATAACC ACGGTTTGAA	14760
AGTTCTTCTT CTAGAGCACT TTTAATTTGG TGACTTGAGT TAACACCTGC ACCGCAGGCA	14820
GCAAGAATTT TAATCATTTA GATTTCCTCC GATTTTATTT TTTAATAGAC AAGATTAAGC	14880
GGTTGCTTCA GCAATGTAAG TATAAAGGGC TTCTGGTTCA GAAATTTTGG ATAGGCTCTC	14940
AAGATGACCA TTTCTGTGA AGAAGTCCAT TAACTGAGCA AGAATGTTTCG TTTGACTTGA	15000
ACTTGAATTA TTAATGATAA AGAAGAGTAG GGATACTTCT ACTTCCTTAT CAGGAGCTAT	15060
CATATTGTGA AAAGTTATTG GTTTTCTTAA TCGAACAACC ACCACTTTCT CAGCTAGATT	15120
ATGAACAATA TCTGTGTGAG GAATCGCTAC ATTTGGCAAG TCCTTTCCTA GAAATTCAT	15180
ATCTAAACCA GTTGAAATG ACTTTTCACG CGTGATCAAG GCTTCACGAT AAGTTGGAGT	15240
GACAATTTCT CGTTCTTCCA ATAAAGTTGC AACCTGATCA AAGAGTTGTT CTTGACTATC	15300
CGCTTCTAAG CAAAACACAA GGTTTTGTG AAAGAAATAA TCTAATACCA TAAGTTTTTC	15360
CGG	15363

(2) INFORMATION FOR SEQ ID NO: 140:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 28882 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 140:

TAAGACTATT TAATAGTGGA GTGAAATAGG ATACGAACAA ATTGATTAGG AAAATCAAAT	60
GAATTTATAG AAATCTTTTA GCAGTTATGT TATCCTATTC TAGTTTCAAA ACGCTATAGA	120

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AGCAGCATTG TGCTAGTCKA GATTCAGTTT ACTATACTAA AACGAGTAGC TTGAAATCAA	180
AAAACCCACC CTCACAGGCA GGTTTTATCT GTATTATTCA GCTAGATTAT GCTTTACCTT	240
CTGAACCGAA TACGTCGATA CGTTCTTCAA CCGATGCTTG GATAGCTTTT ACACCGTCAG	300
CCAAGAATTT ACGTGGGTCG AAGAGTTTTT TCTTGTCGTA TTCTGCTTCG TTTGCTTCGT	360
AGTCACGAGC AAATTTACGA GTTGCGTTAG CGAATGCGAT TTGGCATTCT GTGTAAACGT	420
TAACTTTGGC AACACCAAGT TTGATAGCTG CTTGGATTTG CTCATCAGGA ATACCTGATC	480
CACCGTGCAA TACGATTGGG AATCCTGGAA GAGCTTCTGT CAATTTTTCG AAGTGGTCAA	540
GGTCAAGACC TTCCCAGTTT ACTGGGTAAG GACCGTGGAT GTTACCGATA CCAGCTGCCA	600
AGAAGTCGAT ACCAGTTTCA ACCATTGCTT TAGCGTCTTC GATTGGAGCC AATTCACCTT	660
TACCGATGAT TCCATCTTCT TCACCACCGA TAGTACCAAC TTCAGCTTCT ACTGAGATAC	720
CTTTAGCGTG TGCTTTTTC ACAACTTCTT TAGCCAATTT AAGGTTTCT TCAACTGGAA	780
GGTGTGAACC GTCAAACATG ATTGAAGTAT AACCAACTTC GATACTCA AGTGCATCTT	840
CGTAGTGACC GTGGTCAAGG TGGATAGCTA CTGGTACAGT GATACCCATT GATTCAACAA	900
GGTTAGCGAT CAAGTTGCGA GCAACTTTGT AACCACCCAT GTATTTAGCA GCACCCATTG	960
AAGTTTGAT CAAAACGGA GCTTTTTTAG CTTCTGCTGC GCGCAAGATA GCTTGAGTCC	1020
ACTCAAGGTT GTTTGTGTTA AATCCACCAA CTGCATAACC GTTGTACCG GCTGCTTGGA	1080
CAAATTTTTC TGCTGAAACG ATTGCCATTT TATCAGGCCT CCTGTATATT TTTATGGGTC	1140
ATCCCATTTA CATTTGTCAT TTTATCACTT TTTGCCAAAA AAATCTAGTT TTTCCGCAG	1200
TTTCGATTGA TTTTCTTCTA ACTCCATCTA TGTAACCCCT TTCTCTCCCT AGTCTTGGAC	1260
GACTTTTGGA AAATCTATAA AGAAGGTAA ACTATTCTCC TCCATCTCGA AACGATAAGC	1320
TAATTTTTC TGTCTAATA GACTCTTAAC CACAAAGAGC CCCATACCAG ACCCCTTGAC	1380
CTTGCGACTG GCATTGTCAG AAAAAGACTG GGCTAGTTTT TCTTGTTCCCT CTGAGCTACA	1440
GCTATTTTCG ATAAAAAGTT CTCCTTCTCT TTCTCCAATT CGAACTAAGC CACCTGGAAC	1500
AGAGTGCTTA ATGGCATTGC TGATGAGATT AGAAAGAATC AACTTCATAA CTGATGGGTT	1560
TAGATAAGCC TGCTGATGGG TCAAACTATT GTCTATCTGG AGCTCTCTTT CCTTGGCTAG	1620
CAAGGCATAA TCTTTGACCA GATTTTTCGT CATCTGGAGG AGGTCAATTG TTTCCCTATC	1680
ATCTCGCAAT TCCTGCACAG AAGAGAGGGA AAGTATCTGC AGAACATGGT GATTGAGTTC	1740
ATCCACAATC CCCAAGGCAA CTCCCAGATA CTGGTCTCTA TCCTTATAAC GACCGATATT	1800
CTCTCTCATA TTTTCGATTA GGATTTTCAA ACTAGCCAGC GGTGTTTTCA ATTCATGAGA	1860
AGCTCCTCGT AGGAATTCTA CCTTCATCTT CTCCAGCTGG AGAATGGCTT CATTCTTTTC	1920

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ATGCAAGTCC	GCAATAACAG	TCAAGAGATG	CTGGTAGAGG	CTATTGATTT	G TTCCTTGAG	1980
ATTACCTATC	TCATCCTTAG	AATCCACGCG	CAATCGCACT	TGGGAATCCA	GGTCCATCAT	2040
CCGACGGGTC	ACCCGCTTGA	TTTCCAAAAT	CGGTGCAACA	ATAGTCCGAG	CGTAGATGTA	2100
GGCCACCAAA	AGGGAATCA	GAAAGGAGGC	CAGCAAGGTA	TAGGGAAGAA	ACTGGAGACT	2160
GATTTGCTCC	GCTTCCTTTT	GTAAATCCAT	GGAAGCTAGA	AACTGGAGAA	TCATAGTACC	2220
ACCGTCTTGC	GTTTTACCT	CGCGCTCCTC	AATAAAGAGA	GAGGTTGTCT	GGCGGTCTGT	2280
GTCCAGAGGA	AGACTGTCTT	TGACTTCTAA	CTTGTCCTCG	GTCATCTCAC	CTTTGACGGT	2340
CCCCCTGATA	TCACTAGTCT	GGGAATACAA	GTCTAACACT	TGCTCGATAC	TCTGCCTATC	2400
TTTCCCTTCT	AGGGACTGGG	CAATGGCTGT	TGCCTTTTGA	CCAATGGTTT	CCTGACGATG	2460
ACTCAGATAA	GTCTGAAGGAA	AAAGAAAATA	AATAGCTAAA	TGAAGGCAGA	TAACCAGAAC	2520
ACTAAATATC	GAGAAGGTAT	AGATAAATAT	CTTTGCAAAT	AAACCTGTTC	GTTTCATTTT	2580
CGCTCCAATT	TATAACCAAC	ATTGCGCACA	GTGAGGATAC	AATCCAAGTC	TAGCTTTTTT	2640
CGCAATTCCT	TGATATAAAC	ATCAATAACA	CGGTCAAAGG	GAACCTCATC	TGTCGCTTTC	2700
CAGACGGCAT	CGATAATCTG	AGATCGAGTC	AAGGCCCGGC	CTTCATTTTT	CACTAGATAG	2760
TCCAGAATTT	CCAACCTCTT	GGCATTGATA	GGCACTTCTT	GACCTGCGAG	GCTTGCACTG	2820
TAGCTTTCAA	AGTCCACCTT	GGTATCCTTG	TAAGAAAAGA	TTCGTCCTGT	ATCGTAGTAG	2880
CGCTTGAAAA	TCGCGTCCAC	CCTCACTTTT	AAAAGGGAGA	GGGAGAAAGG	TTTTTCCAGA	2940
TAGCCATCTG	CAAAGAGGC	AAAGGCACTC	ATCTTGATAT	CCTCATCTTG	AAAAGCTGTC	3000
AACATCAAGA	CAGGAACCTG	ACTGGTTTTA	CGAATCTCAG	CTAGGACTTC	TAAGCCGTTG	3060
AGCTTGGGCA	TCTGGATATC	CAGTAAAACC	AGGGCCACCT	CATAGCTAGA	AAATTGCTCC	3120
AGAGCTTCCT	GACCGTCCGC	TGCCCTCAATA	GTTTCATAGC	CACAATCCGT	CAAATAATCA	3180
CTGACCCCTT	CACGGATCAT	CTCTTCATCT	TCTACAATTA	AAATTTTCAT	ACTTTAACTG	3240
CTCTCTATTT	TTTATTTTTT	TTAGAATAAA	TACCTACCCT	ATTTTCTATT	ATAGTCTCTT	3300
GCTGGCCTTT	TGCTTGCAAG	CAACTGACCA	CTAGATAAAA	CGTTGTGAAA	TTCTTTCTC	3360
ATAAATTCCA	TAACCTTAGT	ATATTATATT	TAAGCACTAA	AGTACAAAGA	AAGCAACTGA	3420
AAGCAATGAT	TTTCACCACT	GCTTTCGGAT	TTATTTTGAA	TTGTTAAATA	GCCATTCTTA	3480
TCCACTATTC	TTGAATAGAA	ACACAAGATG	CAATCTTTAT	TCTAGACTCA	TTTTTTCAAA	3540
TTTATTCACC	ATCCAGCAAG	AGCTCTTTTG	GTTGTTTCT	AAGGAGATTG	CTTGAAGCAA	3600
GCGCCATAAC	GAGAACCACT	AGAACCAAGG	CAAGGACAAA	AATGATGATA	AAGTCTGATG	3660

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TCTGAATGGA	AATGTCTAGG	CTCGACAAGG	TCTTGCTAAA	GCCATCTACT	TCTGCACCAC	3720
CACCAAGGTT	AGAGGCTTGA	GCCGCCTTAC	TAGCCTGTTT	GGCAACACCT	GAAGTCACAT	3780
TGGCAAGGAC	AGTGTTCCTA	ATTGCACGGG	CAGTGTAATT	AGCTAGGAAG	TAAGCAGAAA	3840
CTAGAGCAGG	GATAGCAATC	AAGATAGATT	CGGTGATGAA	TTGACCCAAG	ATACTTGCCCT	3900
GCTTGAGGCC	GATAGAGAGG	AGAATTCCCA	CTTCCTTGCG	ACGGGCGTTG	ATCCAAAGGC	3960
TGAGCAAGAG	GGCAAGGAGG	AGAACTGAGA	AGCTCAAGCT	ACCCAGAAAG	AGGAGGTTGG	4020
CCATCTTGTA	CATACCAGAG	ATAGATTGCT	CAAGAGCTGG	GTAGTTAGAG	GAGCTCTTGA	4080
CGAGTGTGTA	GCTCTTCCAG	TTGATACCAC	TGATGCCATT	CAACTCTTTC	ATAACATCAT	4140
CCAAGTTCTT	GTCTGCTGTT	ACAAAGAAGG	TTGCGTCCCC	ATAAATGGCT	GTGTCTTCTG	4200
TGTATCCATA	AAGTTTTGCA	GCAGTGTGAA	TGTCTGTAAT	AGCTGTGTTT	TCGTAAAGTT	4260
CTTGTGAGTA	GGTTACTGCT	GACTTATTAT	GACCATCAAA	GAGTCCCTTG	ATTGTCACTT	4320
CAACTGTTTC	CTTGGCTCCT	TTTTCAATTAT	CTGCATCGTA	GATATTAGAG	TCCAGTTTAA	4380
CCTTGTCCCC	TACTTTCCAG	CCGTGTTTGG	CTGCCAAGTC	CTTGTGCAAG	AGGATTTTAT	4440
CCTTGTGCTC	GTTGGTTAAG	TGCTCTCCTT	CGACTAGTTT	ATAAGAACCA	GAGACAAACT	4500
TGTCTTCTTT	AGAGGAGTCA	TTGACACCTG	TAATCATCAA	GCTACTTCCA	AAACGCTTGG	4560
CACGATCAGC	AGTGAGATTC	TTCTTGGTTT	CTGGCGTTTC	AATCAGGTCA	TATCCAGTCA	4620
AATCTCCGAT	AGCGTTGATA	CGTTTGACAT	AAGACTCAAT	GGCCTTGTTT	TCGGTGATTT	4680
TTTGTATGTC	TTCACCCCTG	ATATTCCCAG	CACCACGAGG	CGTTCCTTGG	TTGACGCGAC	4740
GATTGATTTG	CATGGAGAAG	CTATTGGTGA	TATTTTTTAA	GGTCTCCTGA	GAAGCCTTGG	4800
CAGTAGCTCC	CTTGATTGAC	AAGCCGACCA	AACTCAAGCT	CGCCATGAGG	AGAATAATCA	4860
GGAAGATGAC	AATCGATTTG	AAAAACTTCC	TTGTAACATA	GGCAAATGCG	TTGTGTAACA	4920
TAGATTC CCTT	TTCTAGATTT	TGTTTTAATC	ATTCTATTAA	AATAAGCTCA	AATTATTTAC	4980
TAGTATTGCG	CGTTTCAGTC	AGTTTCTTAT	CCTTTAATTC	AAGTGTAATA	TCTGACGCTT	5040
GTGCCACTTC	TTTACTGTGA	GTTACGACAA	TCACACATTT	ACCTGTTTTTC	TGGGCAAGTG	5100
ATTTGAGTAG	TTTGACAATA	TCTCCAGCAG	TTTLAGGATC	CAGATTTCCCT	GTTGGCTCAT	5160
CAGCTAGAAT	AACTGGAGCT	TCTGAGACCA	AACTGCGAGC	AATGGCAACA	CGTTGCTGTT	5220
GACCACCTGA	TAACTGGAGA	ACATTCCGCT	TGATCTGGCT	TTTATCCAAA	CCAAGCTCAA	5280
GAAGTGATTT	CTTGCTTGCC	TTTTTGTTGA	CCAATCGGAT	ATTTTCCAGC	GGAGAAAGAT	5340
AATCTATCAA	GTTATAATTT	TGAAAGACCA	GGGAAATATG	GTGCATGCGA	TGGTAAGAAT	5400
AGCCCTTCTT	ACGAATATCC	TCTCCTTGAA	AAAGGATAGA	ACCTTCAACA	GGAATATCTA	5460

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GACCAGCAAG TAGGGACAAG AGTGTGGATT TTCCTGCTCC TGACTCCCCA ATAATACTGT	5520
AAAATTTTCC GGGTTCAAAA TTATAATTGA TCTGATATAG GACTGCTTCA GCAGTATTCT	5580
TATAACGGTA GGTAAACATCT TGTAAATTGTA ATAAAGTCAT GATTTCCTCT TCTTAACTAA	5640
TAGATGATAA AATTTCTTTC GGTGATTTTC TAAATAAGAA TAGGAAACAA AGGGCTACAG	5700
ATAAGCAACT AAGCAGAACT AGAAAAACAT AGGATTCTGC AAAAGATAAG ATGCTAGTTG	5760
ATAAACTGCT TGCTTTGGCT AGTGTATCTT GTAAGCTTGC CTGATCTCCA CTTGCTAGTA	5820
GAGTTTGGAG TAGGTAAGTT GTGATTGCGT TTCCTGCAAC AAATGCTGGA AGCAAAGCTC	5880
CAAGAGATAC CAAAACCTACC TCTAAACAGA ATTGTAGGAA GATCGAGCTC TTGCCTTTTC	5940
CAAGTGCAAG TAAAATCCCC ACTTCATAGA CCCGTTCTCT CAACCAGAGA GACAAAACCA	6000
GAATTAAGGC TCCAGCTCCT GCTATCAACA TCCCATAAAG GAAGATGGTC AGGAAGGTTT	6060
GGAAAGTTGC AACTGAGTCT TTGATTTGTT CAAAAGCCTT GTTTTCCTTT TCGACTTGGT	6120
AGCCTTGATT TTCCAAGGCC AAGTTTTCTA CCTGCTTCAT GAGTCCGTCC ATTTCTTTAG	6180
GATTTTCTAC ATAGAAGCGT GCTGCACTGA CTTGAGCTTC ACTATTGCCC AAAAGGGTTT	6240
GGCTACTTTC ATAGTCTGTA AAGACTTGAT TTTCAC TGAA GTCAGAAGAC AAGCCTGTGA	6300
ATTTCTCTTG TTTTTTACCA GAAAAGATGC CGATAATCTC AACTCTACT GTTTGTCCTT	6360
TTCCAGATTC AGACTGACCA GCATCCAAGC CAATCTTGTC ATGAAGCGAA AGACCGTTCT	6420
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CTTCTTTTAG ATTGAAAGCC GAACTGGTAA AGGTTACATC CTTGGATGAA TCCTCAAGAG	6540
CCGTTAAGCT AACCAAGTTA TTGTCTGCAG CTGATAAATC ATCACGCTCC ACGCTCTGCT	6600
CGCCAGTCAC TGCTTCCTTG TCTTTTAGTT TTGCGACCGT CTTAAGTTCA GGAGAGACAT	6660
TTCCAGCCC CTTAATCTTG CTTACAGATG CTAGGCTGTA CAACTTGAAT GTCTGACCAT	6720
TCTCTATCTT CTTAATAGAA AAAGATGTAT TGAGTGATTT ATAAAGATTG CTTTCTACTG	6780
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TCAGAAATAA AATAAACTT CTCAGTCGCT TTCTGCTGAC ATAAGCCCAA GATCTTTGGA	6900
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TTATGAAATA CGAAAAAAA ATATCGAGTA GGGGATAATC TCTAGCCCCT CTCACACCAC	7020
CATACGTGCC GTTCGGCATA CGGCGGTTCA ACTAACTTTT AACGCATGTC GTTCAAGGTA	7080
ATAATCCAAA CACGAAACCA GTCCACGTTT TTCAAGGACT GGTTTTGATA TAGCACGTTT	7140
AAGTACCGAC TTCTGAGCTA CTATAGTAGA TTGAAACTAG AATAGTACAC CTCTACTTCT	7200

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AAAATATTGT TAGAAATCGA TTTGACTGTC CTGAACAATT CGTCCTATTC TTATTTTCATT	7260
TTACTATAAT TGATAGTGGT CGCCCCAGCC AGATACCTTA TCTGCTATCC ATTTAGGAAC	7320
CCCTAACTTA AGCAATCCCC ATAATCGTCT CGATTTCTTC TTCCATTGCT TCCAGATAAT	7380
CACTCGTAGG CGAGTACGCA AGCGCTCATC TATGCTAGTG ACTATACTTT TCATATTTAT	7440
AATTCATTCC TTTCGTTTCA CTCAAGGCAC AACACAGAAT GAAAAAGTGT TGTGATCTTT	7500
ATTTTGT TTTT ATAATAATAG TGAGAAAACC TATCACTACT ACAAATCACG GGGAGGTGAA	7560
TAAGTGAGTG GTACAGCCAC TACCTCGCAT ATTTTGTCCAC ATCATTTAAC GGTACATAAT	7620
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CAAAGGTTGG AGCTCCTGCT GGATGATTTT TATTTGCCCTC TTTCAATTTT TCAATAATGG	7740
CATTTTCT GTATCTTTTA TATTATCAGG ATTTTTCCT AAGATTTTGT CTGGATATGT	7800
CGGTTTAGCA GAAACAATTT TTAATTTTAC TTCTTTT TTTCAAGCAC TTGTCCAGTT	7860
TCCAGCATTA TCTTTAGCAT TTAATTTTAC AGTAATTCCT GAACTAGGAA CTTCAGTAGC	7920
AGGTTGATTA TCAACATTAT TCAACTTTAA TTTCAAAAGA GCTGTTGCAT CAGACGTTTT	7980
ATCAATCGTT ATATATAATG ATGAATTGTT ATTATAAACA GTTCCTTCAT ATTTAGCTGT	8040
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GCTTACGTCT AAATGAACTT CCCCCTATT ATTTGGCTTA GCAACAACCTG TTATAGTAAA	8160
ATAACATAAA ATTTGCATAA ATAGATTAGG GAAATCAAAG CAGCTTCTAG GAATGTTTTA	8220
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GGGCTGTTTT AGTGAGAACA GCACTATTTT CCCAAAGAGA GAGAATGATT TCCTGAATCT	8520
GATCTTGATC CAAAATCATC TGGTGTAGAC ATTCTTGAT TGGCTTCAAG TCCACGAGTC	8580
TTTCTCCCAT ACTCCAAAGA TAGAGCTGAG AAAAAGTATG AACACCTTGG TGACCCCTGAC	8640
GCCACCATGT CTTGAACAAA TCCCGCTCAG CTTTGATTAA GTCTGATAGG GCTTGATGTC	8700
CCGTCTGAGA CCAAACCTGA CCCAACATGA TAGAAAGACG AAGTCCAAAG TCATACTCAA	8760
CCGCTTCAAT CGTATCACTT AAAATATCTC TTACAGAAGT GTATTTGTCT TGTGGAAGCA	8820
CGAAAACATA ATCCTGAGCT CCGACCTGTA GCACTGTCTG ACAATTGCGA AAAAGAGTCC	8880
GCATCATATC TAGCCAAGAA GCCAGATTTT CCTGCTGAAA ATAAGAAAGA TGGCAATAAA	8940
CCAACTGAAT CTTTTTAAAA ACTTGCGGTG CCTGTCCCTT GCCCTCAACC AGATAGGAAT	9000



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ACCAAGGGTT	TAGCGAACGA	GCCTGCTCCT	GCTGGGTCAA	AAGGGCAACC	AACTGCTTTT	9060
CACGCTCGCT	GAGCCCAGCT	TCCTCCAGCA	AAATCCACTG	CTGAGAAGCT	AAAGGGAGCG	9120
TGAGATAGCC	CTCTTTCTCT	ACTGGTTGGT	CTGAAATCCG	AGCCTCAGGA	AACCAGTCTT	9180
GTAGTTCTTT	TGCCCTCATG	TTCTAGCCCT	CCACTTTTGT	GATGCACCAT	GAAACCAAAC	9240
TCTCAAGACG	TTCCAGATTC	TCAGTCATAT	GGAGATAGCC	CATAACCGCT	TCAAATCCCG	9300
TGGACATACG	ATAAGTCACG	ACATCTGCAT	TTTTAGCCTT	TGTGTGGCTA	TTGGTATTGC	9360
GGCCACGTTT	GTAGATTTCT	TCTTCTTTTT	CCGTTAGGAC	CTGCTCCTCC	AACATGAGAG	9420
CAATCAGGCG	AGCCTGAGCC	TTGGCTGACA	CGTACTTAGT	TGCTTCTTGA	TGGAGTTTAT	9480
TGGGTTTGGT	CATACCTTTG	AGGATGAGGT	GACGGCGAAT	ATACATAGAA	TACACCGCAT	9540
CCCCCTCAAA	GGCTAGCGCA	ATCCCGTTAA	TGAGATTGAC	ATCAATCACG	TGTCCACCTC	9600
ACTCCATCCT	TGGTATCAAG	GAGCTTAATT	CCTTGAGTAA	CCAATTGGTC	ACGGATTTGG	9660
TCTGCTGTCTG	CAAAGTCACG	ATTGGCACGC	GCCTCTTGGC	GTTTTTGAAT	CAAGTCTTCA	9720
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AGAGCTTGCT	TGACACTTGC	ATCATAGTTC	CCTGAGTTGA	TCCATTTGGC	CATTTCAAAG	9840
ACAACGTGTA	TACCGTTGGC	AGCATTAATA	TCTTCATCCA	TAGCTGCTAC	AACTTATCT	9900
TTAAAGTTTT	GTAACCTTTG	GGCATCCACA	TTTCCTGTAA	ATGGTTGTTC	GTAAGTATTC	9960
TTGAGATACT	TGAGATTGGT	CTCGGCATCG	CGAACTGCCT	TTTCCGTGAA	GTTGATAGGC	10020
TTACGGTAGT	GCTGGGTCGC	AAAGAAGAAA	CGAAGTACTT	GCCCATCAAG	AGTTTTAAGG	10080
GCATCGTGTA	CCGTAATGAA	GTTACCCAAG	GACTTAGACA	TTTTGACATT	GTCGATATTG	10140
ACAAAGCCAT	TGTGCATCCA	GTAGTTAGCA	AAAGCCTTGC	CTGTTTTAGC	TTCAGACTGG	10200
GCAATTTTCAT	TGGTGTGGTG	TGGAACTCT	AGGTCAGCTC	CACCACCGTG	GATATCAATG	10260
GTATCACCTA	AAATCTCTGT	CGACATGACT	GAACACTCAA	TATGCCAACC	CGGACGTCCA	10320
GGTCCCCAAG	GACTATCCCA	AGAAATCTCA	CCTGGTTTGG	AAGATTTCCA	TAGAGCAAAG	10380
TCTACAGGAT	TTTCCTTACG	AGCCGTTTCT	TCATCGGTAC	GACCTGAAGC	ACCTAGCTCC	10440
AAATCTTCCA	AGGTTTTAT	AGCCAATTTA	GCATAGTTGT	GGGATTTTTT	TACACGAAA	10500
TAGACATCCC	CTTGACTCTC	ATAGGCAAAG	CCTTCTCGA	TCAAGTCTTC	CACAAAACGG	10560
ATGATGTCTG	CCATAAACTC	CACTACACGC	GGATGGCGAG	TCGCAGGTTT	CACGCCCAAT	10620
GCCGTCACAT	CCTCACGAAA	GGCAGCGATG	TACTTATCCG	CAACCTCCTG	AGGCGTGATA	10680
CCTTCTTCCC	TGGCACGGTT	GATAATCTTA	TCATCCACAT	CTGTAAAATT	GGAAATATAG	10740

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GCAACCTTAT	ACCCACGGTA	CTCAAAATAG	CGACGAATCG	TATCAAAAGC	TACCGTCGAA	10800
CGGGCGTTTC	CTACGTGGAT	ATAGTTGTAC	ACCGTTGGCC	CACAAACATA	CATCTTGATC	10860
TTGCCGTCCT	CAATCGGGAC	AAATCTCTCG	AAATCACGAG	ACATGGTGTC	ATAGATTTTA	10920
ATCATAAATC	ATAATCAGGA	AAGCTGAAAT	CCAAGAACAA	TTAGTTTCAT	CACTAAAAGT	10980
TCAAGTAAAT	TTCAGTCCGA	ATATCTCTAC	ACTTCGGAAT	CCCTTGCTCC	TTTCTCATTC	11040
AGATAAACCA	CCTGAGTCTG	TTTGACAAAG	CCAATTTTTT	CATACAAACG	TTTGGCACCT	11100
ACATTGCTAT	CTTCCACTGC	AATCTGAAAT	TCCTTGTCAT	TTTGCTCAAT	TAGTTGGTTG	11160
ACGAGGGATT	TTGCTAAGTA	GCTTCCATAG	CCTTTTCCAC	GTTTCAGGTC	CAATATTGCT	11220
AAACCGTAGA	GGTAATTCGT	ATTAGTCGAT	AAATCAACCG	TACAAGTTCC	AATAACCTGA	11280
CCAGCTTTTA	ATAAAATATA	TAGTCGGCTT	TCTGGATCTT	TCAGAGCTTC	AGCGACATAT	11340
CTATCCACAA	CTTCTCTCGA	TTCATGTTCC	TCTGAAAATG	CCTGAAATTT	TAATTGACTA	11400
ATTTGATCCT	GATACGAAC	ATCTGCTAAC	AAAACCTCAA	GATGGGAAAC	ATTTGCTAAC	11460
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CAGTTACTGG	CAAAGTCAGG	ATGATTCTCT	AAAAAATAC	GTTCTGTCTG	AAAAGTGACT	11580
GACCGAATGG	GGAAGAAGC	TGTTTCTCTC	TCAAACTAG	TAAACAATGC	ACGCGCAATC	11640
CCCTGACGGC	GATGACCTGG	ATGAACCAGT	ATCGTCACCT	CTACATCTTG	GTCATCTGCA	11700
TAGACAGTTA	ATAAACCAAC	AAGTTCGCCT	TTTTTCATAAT	AAAGGAAAAA	GGCGGGCATG	11760
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TGGCAACAGT	TAATTACTTT	TTTCGCCTCA	GATAGCTCCT	CTTGGCTTAA	CTTGTTTCTT	11880
GCTTGAATCA	TATAGGTATC	CTCTACAAAC	CAGACGATCT	GTGACTGGCA	TCTTTAGCCT	11940
GCTCGAGTTT	ATTGACATAA	TACTCTCGTT	TTTCTTCGAC	TTCTGTGAATG	ACAGGCTCAT	12000
CTTTCTTACC	ATGAAGACGG	ACAATCTTGG	CCGGAATACC	GACAACCGTC	ACGTCACTAG	12060
GTACATCTGC	TACGACAACT	GCTGCAGCAC	CGACCTTGGC	ATTTTCACCA	ATTTCCACAG	12120
GCCCCGATAAC	TTGGGCATGG	GCTGATATGA	GGGCTCCCTT	TCGTACAGTC	GGATGGCGTT	12180
TGCCACAGTC	TTTCCCTGTT	CCCCGAGAG	TCACTCCGTG	ATAGAGAAGA	ACGCCTTTTT	12240
CAACAATCGC	TGTCTCTCCA	ATCACCAGAC	CAGAACCATG	GTCAATAAAA	ACACCTGAAT	12300
CAATCTGGGC	TCCTGGATGA	ATCTCAATCT	GAGTCCAAAA	GCGCCAAAAC	TGACTGTACA	12360
TACGAGCTAA	TAGTTTGAAG	CCGTGCTTCC	AGAGAAAATG	CGAGAGACGG	TGGGCCGCCA	12420
AGGCCTTGAC	ACCTGGATAA	GTCAGCAAAA	CCTCCAAAGT	GGTGCGGGCC	GCTGGATCAT	12480
TTTCTTTTAC	AATATCAATG	GTTCGCGCC	ACCACCCCAT	ACATTTCTCC	TTTCTTTATT	12540

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CTGAATCTTT	TGATGTTTCT	GTAAATTCTT	TCTTAGGTTT	GTAATCCTTT	TGATGACGTG	12600
GGCGGTGAGG	GCGCTCAGAC	TTTTCACCTT	TTTCATCATG	CTCAGGTTTT	GGCGGACGAG	12660
GTAGAAGAGC	CTTCATAGAG	GCATCGATAC	GGCCTTTTTC	ATCAATTTTG	ATAACCTTAA	12720
CATCAACTTC	ATCCCCGATT	TCTACCAAAT	CCTCTACACG	ATTGGTACGA	GTCCAAGCCA	12780
TCTCAGAGAT	ATGAACAAGG	GCATCTGTCT	TATCAAAGAG	GTTAACAAAG	GCACCAAAT	12840
TCTCGATACG	AACGACTTTA	GCACGGTAAA	CTTCATCCAC	TTTGGCTTCA	CGAACCAAAC	12900
CAGCAATAAT	TTCTTTGGCA	CGGTTAATAG	CATCTTGGTC	ACTAGAGTAG	ATAGACACAT	12960
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TCGGAGCAGT	TGGAGCCAAT	TCTGGACGAA	CTTCTGGAAT	GGTTGCTTCA	ATGACATCAA	13140
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TCCCTTGAAT	CTTGATATCC	ATTTGAAGGG	CTGTAATCCC	ATCACGAGTA	CCTGCAACCT	13260
TGAAGTCCAT	ATCTCCAAAG	TGATCTTCCA	AACCTTGGAT	ATCTGTCAAT	ACTGTGTAGT	13320
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ATTCCAAAAC	TTCTGCTACT	AGACGGATAG	CGTAGGGGAA	TTCTTCCAAG	CTTGGCAAGA	13500
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CGTAACGACC	TGTTTTCCCT	ACAGAATATT	GAGGGAAGTT	ATAGTGGTGC	ATAAAGCGTT	13620
TCTTGTAATC	TGGATCCAAA	CCATCAATGA	TTTGAGTTTC	TCCCATCGGA	GCCAAGGTCA	13680
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GGAAGTCAAC	AACCGCATCC	AAAGGACGGA	TTTCATCGAC	CTTACGACCA	TCAGGACGCA	13800
CCTTGCTCTC	TGTAATTAAA	CGTCGCACTT	CTGCGTGTTC	CATTTGTTC	AAGATTTTCA	13860
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CAGTCACTTG	GTCTTTCACT	ACTTGAGTCG	CAGCTTCACG	GGCCAATTTC	TCTTCTACTT	13980
GAACTGCCTT	TTGGAGGTCA	CTGTTGTAGG	CTGCAATGAT	TTCAGCTTGC	AATTCAGCAT	14040
CCACGTGAAG	CAATTCCACT	TCTGCTTTTT	CTTTACCGAC	AGCAGCAACG	ATTTCTTCTT	14100
GGAAGGCAAT	CAATTCCTTG	ACAGCTTCGT	GCCCTTTAAG	GAGCGCTTCC	AACATGATTT	14160
CTTCTGACAA	TTCTTTGGCA	CCAGACTCTA	CCATGTTGAT	AGCGTGCTTG	GTCCAGCTA	14220
CTGTCAATTC	AAGAAGAGAT	TGCTCTGCTT	GTTCTTGACT	TGGGTTGATG	ATGATTTGGC	14280

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CATCTACATA	TCCCACTTGT	ACCCCAGCAA	TTGGTCCGTC	AAATGGAATA	TCTGAAATAG	14340
ACAGTGCCAA	AGATGAACCA	AACATAGCAG	CCATTGGTGC	AGATGCATTT	TCATCATAAG	14400
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ACTCACCGTA	ACGTACGACA	ACAGATCCAT	TTGCTTGCTT	AGCAACCTGA	CCAGTCTCTA	14700
CAATTAAGTC	ACGACCCGCA	AAAGTCGTTT	GAAACACTTG	TTTTGCCATT	TTAATCCCCT	14760
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CAAAGTAAAA	ATAGGAAACT	GACGAAGTCT	TCGATGAAGA	CAAGACAGTT	TATCTTTTTT	14880
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GTATCTAAAG	CTTTCACGCT	AATCGCTATC	GGGCGATTAG	CTAAATGCTT	TACTAACTCT	15240
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TGTATTTTGC	TGTATCAGCA	TTATTTCATG	TATAGAGATG	CACACCGGCA	ACATCCTGAG	15540
TTACCAAGTC	CACGATTG	TCCACTGCAT	AGGCAAGTCC	TGCTGCTCTG	AGCGACTCAG	15600
GGTCATGCTC	ATACTTGCTT	AAGATGGCTT	TAAATTTGCG	TGGAAGATGG	ATATTCTCAC	15660
AAGTCTTCAA	GAGTCGGAGA	GCCTGATTTT	GATTTCAGAA	TGGCATAATT	CCTGCATGAA	15720
TGGGAACATC	AATCCCAGCC	AAGATACACT	TGTCCTGAAA	ATCATAGAAG	CGCTCATTTG	15780
CAAAGAAGAG	CTGAGTTACG	AGGCTCGAAC	AGCCTGCATC	CACCTTCTTC	TTAAGATTTT	15840
GAATATCTGA	AATCTGATTT	GGCGAATCTG	GATGCCCTTC	TGGATAGCAA	GCTCCAATAA	15900
TATCAAAGTG	AGGGGTTTGT	TCCTTGATAA	ACTCAATCAA	GTCGGTTGCA	TAGCGGAAAT	15960
CCTTTTGTGG	TTCCACGTCT	GGAATAATAT	CCCCACGAAG	AGCCAAGATT	TTCTGCACCC	16020
CAACTTTGTC	CAAGTCAGCA	ATAGTTTCAG	CAACCTTGTC	CTTAGTTAGA	TAAATAGCTG	16080

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GCAAGTGGGC	AATGGTCGGA	ATCGCCAAAT	CATTTTGGAT	AAAGTCAGCC	AAACGAACCG	16140
TCGTTTCCTT	GATATTAAAT	TTATTATTGC	TGGCAGTTAC	ACTGATAAAA	TGGGGAGCCA	16200
ACTCCTGCAT	ATCCTGCAAG	GCTGAAATAA	TGTTATCATT	ACCCACGGCT	GGGTTTGGAG	16260
GGAACACTTC	AAATGAGAGT	GACGGTGTTT	GGCGTGACAT	ATGTAATAAC	CTTTTCTAGT	16320
TGATTTCTTT	TTGAACAACC	ACTGTATGGA	GAGAAATCCA	ATCTTACAAT	TTCTCACGCG	16380
CAGCTTTAGC	TGCTTCAACA	AGGCGGATCA	AGCTTTCTTT	TGTTTCTGGG	ATACCACGTG	16440
TTTTCAAACC	ACAGTCAGGG	TTGATCCAAA	CTTTCTTGCT	TGGCACTTTA	GCAAGGATGG	16500
CTTCGATTGT	GTGTGTCGATT	TCGCCTTCAT	TTGGTACACG	AGGTGAGTGG	ATATCGTAAA	16560
CCCCAGGTCC	CACTTCTGTT	TGGAAGTTT	TCGCTTTGAG	TTCGTCCAAG	ATTTCAAGGT	16620
TTGAACGGTT	AGCTTCAAAG	GAAATAACGT	CTGCATCCAT	GTTATCGATA	GCTGGGATGA	16680
TATCTGTAAA	TTCTGAGTAA	CACATGTGAG	TGTGGATTTG	TGTGTCTGGC	GCTACTGTTG	16740
AGTGTACCAA	GCGGAAGGCA	GGAATAGCCC	AGTCAAGGTA	GTCTTCGTAC	CAGTCGCTAC	16800
GGCGGAGTGG	CAATTTTTC	CGAAGAGCAG	CCTCGTCGAT	TTGGATGATT	TTCACACCAG	16860
CAGCTTCAAG	GTCAAGTACT	TCATCCTTGA	TAGCAAGGGC	GATTTGGAGA	GTTGAATCCT	16920
TGATAGAGAT	GTCTTCACGT	GGGAATGACC	AGTTAAGGAT	GGTAACAGGT	CCAGTCAACA	16980
TACCTTTAAC	AGGTTTGTTT	GTACGACTTT	GTGCATAGCT	AGACCATTTA	ACAGTGATAG	17040
GGTTAAGACG	AGTGACATCA	CCCCAGATGA	TTGGTGGTTT	TACCCACGCG	ATACCGTATG	17100
ATTGTACCCA	TCCATTTTTA	GAGAAGAGGT	ATCCTGACAA	GTTTTGACCG	AAGTACTCAA	17160
CCATGTCATT	ACGCTCAAAT	TCACCGTGAA	CAAGGACATC	AAAGTCAATA	TCTTCTTGCC	17220
ACTTGATCCA	TCGTCAATC	GTTTCAGCAA	GGAAAGCGTC	GTACTCTTTT	TGAGACAATT	17280
CACCTTTACG	GTAAGCCAAA	CGTTTGGCAC	GAACCTCTTT	TGTTTGAGGG	AATGAACCAA	17340
TCGTTGTTGT	TGGAAGAGCT	GGAAGTTTGA	AAGCTTCTTC	TTGGATAGCT	TCACGTTCTG	17400
CAAAGGCTGG	CAAACGAGTG	TAGTCTGCGT	CTGTCAAGCC	AGCGATACGC	GCACGAAGTT	17460
CAGCATTTTC	ACCAACACGC	TCAGTCGCAA	AGAGTTCTTT	GTGGCTGCA	AGAGCTTCTG	17520
AACCTTGACC	ATTTCCGATA	GCATCCAAGT	CACGGATTTC	ATCCAATTTT	TCAACTGCAA	17580
AGGCAAAGTG	GTTCAAGAGT	GCTGGTTCAA	ATTCTTCATT	AGCAGTTGTA	AATGGCACAT	17640
GAAGAAGTGA	GCAAGAGCTT	GTCAAAACGA	TGTTTTTCAGC	TGGAATTTGC	TCAAGAACAG	17700
CCAAGCTCTT	TTCGTAGTTG	TTGCGCCAGA	TGTTTTTACC	ATTGACAATA	CCTACATAGA	17760
GAGTCTTGTC	AGCTGGGAAG	CCACCTTTAA	CGAGTTCAAG	AGTTTTCTTA	CCTTCAACAA	17820

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CCACTAAGCT	ATCTACGAAG	TCGTCTGCTT	TCACGCCTTC	TTCAAAGTCT	GACAATTGAA	18120
GGAAAGTGAA	GGGACCTACA	AGAACAGGAC	GAGTGTTCAA	TCCAAGTTCT	TTGGCTTCTT	18180
GGAACTCATC	GAAAATCTTG	TGACCAGCCA	ATTTTACTTG	AGTGTCTTTT	TCAAATTTAG	18240
GAACGATGTA	GTGGTAGTTA	GTGTTGAACC	ATTTCTTCAT	TGGAAGGGCG	CGAACGTCCC	18300
CTTTTCTCTC	CTGGTAACCA	CGTCCCAAAG	CGAAGTAGCG	CTCAAGGTCA	GACAAGTCCA	18360
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AATCTATGAG	GAAGACAAGA	AAAAGAATAT	CAATCAAGTA	AAGTCACAAA	GTCACATTAG	19800
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CCACGACTTG	ATAACCCATA	CCGATGAAGA	TATCTTCGAT	TTCTTCACTG	GTTTGTGTCA	24600
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CACGCAAATC	TTGCATCTCT	TTTTCATTTT	CAGCAGTAAT	CTGCTTCAAG	CTAGCCAGCG	24900

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GGCTACTAGT	CTTTCAGATT	CCTATTCAAT	TACTACTTAG	TTTATCAGAT	TTTTACCATT	25200
CTTGCAAGAC	CTATCTTACT	TCTGCTTGTT	AGCTTATTCT	TATCTAAATT	TATATAAACc	25260
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GACTAATTCA	TGATGTATAG	CTTGATATAA	TTCTTGTTTC	GAAAGATTCT	CCTTAGGTAT	26280
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(2) INFORMATION FOR SEQ ID NO: 141:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 12835 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 141:

GCCTATGTCT TTTTCAAAAA AATGCTTGAC TTGAGACGGG AACTAGGGAA GTCTAAAGGC	60
GGAAGGCATT GATTTATACT CTTGAAAAAT CTCTTCAAAC CACGTCAACG TCGCCTTGGA	120
TTATATATGT AACTGACTTC GTCGATGCTT ATCTACAACC TCAAAGCAGT GCTTTGAGCA	180
ACTTGCGGCT AGTTTCCTAG TTTGCTCTTT GATTTTCATT GAGTATTATA TTACTTTCTA	240
TTTGTAGGAG GTGGCTTATG AAGATTCCTC TCTTAACTTT TGCAAGGCAT AAATTTGTTT	300
ATGCTCTGCT TACTTTGCTT TTTCTTGCTT TGGTTTATCG TGATGTTTTG ATGACTTATT	360
TCTTTTTTGA TATTCATGCG CCCGATCTAG CTAAATTCGA TGGACAAGCA ATTAAAAATG	420
ACTTATTAAA ATCAGCATTA GATTTTCGTA TTCTCCAGTT CAATCTAGGT TTTTATCAAT	480
CATTTATTAT TCCAATCATC ATTGTTTTGC TAGGTTTTCA ATATATTGAG CTGAAAAATA	540
AAGTTTACG ATTGAGTATT GGAAGAGAAG TGAGTTATCA AGGGTTAAAA AGAAAGTTGA	600
CTTGGCAAGT TGCAAGTATC CCTTGTTTGA TATATTTAGT GACTGTGCTG ATAATTGCAA	660
TTATAACCTA TTTCTTTGGG ACTTTTTCTC CTCTTGATG GAATTCCTTA TTTTCTGATG	720
GAAGTGGTTT ACAAAGACTC CTAGATGGAG AGATAAAAAG CTATTTGTTC TTTACTTGTC	780
TCCTACTAAT CGGTATTTTC ATCAATGCAA TCTATTTTTT ACAAATAGTT GATTATGTGG	840
GGAATGTGAC TCGTTCGGCA ATCACCTATT TGATGTTTCT TTGGCTTGGT TCTATGCTGC	900
TTTATAGTGC CTGTCCTTAC TATATGGTTC CTATGACGAG TTTGATGCAA GCTAGCTATG	960

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GGGATGTAAG TTTGATGAAA CTCTTTACTC CTTATATCCT TTATATTGTC CCTTACATGG	1020
TGCTTGAAAA ATATGAAGAT AATGTTTAAG AATTTTAACA ATATTTTGCT AAATAGAAAG	1080
ATTGTTTTAC TACTTCGTAT AGTTCTGATG ATGATTTTGA TAAACCATCT ATTGTCAACA	1140
GCGGTTCAAA AGCAGGATGC TGTATCTTT TTCAAGAGAG AATTGATTTC AATTTTTTCC	1200
TATAATGACT ATTCTGAAGC GAATTTAGAA ATCCCCAAAC TATTGTTAAA CCTTTCGCTT	1260
TTCATGGTAG GATGGCTCTC TGTCATTTTA CTTGAAAGTG ATTTGGCAGA CCATTACCAT	1320
CACCTGATTC GCTATCAATC AAGCTCCTTT TTCGATTATA CAAGGAAACG ATTGGTTGTC	1380
ATTTCTAAAT TTTTACTCA AGATTTGTTT GTCTGGTTTC TTGGTTTACT TCCTCTAGGA	1440
ATTCATTTCA AAACAGTCGC ACTTTTCTTT TTAATTGCTC AGTTAATGAT GTTGACTTA	1500
CTACTGTCTT ATCTGATAGC ACTGATTAGT GCGGGCGCTG GTTTTTCCTT TTTTCTCTAT	1560
TTTTTAGCAT TTGTGGGACA AGAATGGATG ATGGATCATA TTGTAACAGT GTATTTAGTA	1620
CTCTTAAGTT TATTAGTTAT GTTGATTGTT AGTCGCTTGG AAGAGAAATT TAAGAAAGGA	1680
TAAACGATGA GACTTGAAAT TATAAATGGA CAGAAAATTT ATGGGAAAAG ACCTATTTTA	1740
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TCTGGCAAGA CGGTTCTTTT AAAGATACTT GCTGGTTATA TTAAGCTTGA CAAAGGAAAA	1860
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TTAATTGAAA AAGTCGACTT TTTATCTCAT TTATCCCTGA GAGAAAATTT GGAACGTGTA	1980
AGGTATTTTT CATCTAAAGT TACGGAAAAA AGAATTGCCT ATTGGATTCA ATACTATGAT	2040
TTACAGGAAT TTGAAGACAT TGAATACCGT CATTTATCCT TAGGAACAAA GCAAAAAATG	2100
GCCTTGATTC AAGCCTTAT TTCTCTCCT TCTATACTCT TTCTCGATGA ACCTATGAAT	2160
GCTTTGGATG AGAAGAGTGT GAGGTTAACC AAACAGGTCA TTTTATCTTA CCTGAAAAAA	2220
GAAAATGGTC TGGTTATCCT GACGTCGCAC ATATCGGAAG ATATTTCAGA CCTTTGTACA	2280
GATGTATTAG TTGTCGAAAA TGGACATATA CAAATGTAAA GGATATACAA TCCTAGGAGA	2340
TGGCTTATGG CACATCTAAA ATCATTATTT ACACGATATT CCAAGGTTTA TATTGGTTTA	2400
GTTCTGCTGA TCTGGCTGTC TTTCTTCTTT ATCCCTTGGG ATAAACCACT TCTGGGGATA	2460
AGGATTGACA TCTTCATCAT ACAGAAAAATC TTGCTAGCTT TTGGAATTCT GTCCATTCTC	2520
ATGGCCTTGC TGTCCAAGAA AGTCAGTCTC TTTGTTTTTG GACTGATTTG CTGTCTTTCT	2580
CTTTGGATTA ACTTATTTAT CACATTTGCC ATTTTGCCGA TTTTGGCAA TTAAACAGTC	2640
ATAAAAGTCG GAGAGGTTAG CTTGAAAACT AACCTCTTTT TCCTTTTCAA AATGGGGATT	2700

958

CTTCCTTGAA AATAATCAGT AATTGTGCTA AAATTAAAGG AACATTCTAA AATATTCGGA	2760
ATTTAAAGTA AGGAAAAACA TGGCTAATAT TTTAAAAACA ATTATCGAAA ATGATAAAGG	2820
AGAAATCCGT CGTCTGAAA AGATGGCTGA CAAGGTTTTC AAATACGAAG ACCAAATGGC	2880
TGCTTTGACT GACGACCAAC TAAAGCAAA AACAGTTGAA TTTAAGGAAC GTTATCAAAA	2940
TGGAGAATCA CTGGATTCAT TGCTTTACGA AGCATTTGCG GTTGTCCTGTG AAGGTGCCAA	3000
ACGTGTCCTA GGTCTCTTCC CTTATAAGGT TCAGGTCATG GGGGGGATTG TTCTTCACCA	3060
TGGTGACGTG CCAGAGATGC GTACAGGGGA AGGGAACC TTGACTGCGA CCATGCCGGT	3120
ATACCTCAAT GCCCTTTCAG GTAAAGGGGT TCACGTAGTT ACGGTTAATG AATACCTGTC	3180
AGAACGTGAC GCGACTGAGA TGGGTGAATT GTACTCTTGG CTTGGTTTGT CAGTAGGGAT	3240
TAACCTGGCT ACCAAATCTC CAATGGAGAA AAAAGAAGCC TATGAGTGTG ATATTACTTA	3300
CTCAACTAAC TCAGAAATCG GATTTGACTA CCTTCGTGAC AACATGGTCG TTCGCGCCGA	3360
AAACATGGTA CAACGTCCGC TTAACATATGC CTTGGTCGAT GAGGTTGACT CTATCTTGAT	3420
TGACGAGGCT CGTACACCTT TGATTGTATC AGGTGCCAAT GCGGTTGAAA CCAGTCAGTT	3480
GTATCACATG GCAGACCACT ATGTAAATC TTTGAACAAA GATGACTACA TCATCGATGT	3540
GCACTCTAAG ACTATTGGTT TGTCTGATTC AGGGATTGAC AGGGCTGAAA GCTACTTCAA	3600
ACTTGAAAAC CTCTATGACA TCGAAAACGT GGCTTTGACT CACTTTATCG ATAACGCCCT	3660
TCGTGCCAAC TACATCATGC TTCTCGATAT TGAATATGTG GTGAGCGAAG AGCAAGAAAT	3720
CTTGATTGTC GACCAATTTA CAGGTCGTAC CATGGAAGGT CGTCGTTATT CTGATGGATT	3780
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CTCAATCACG TACCAAAACC TCTTCCGTAT GTACAAGAAA TTGTCTGGTA TGACGGGTAC	3900
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GGTTGGTACA GTAGCGGTTG AAAGTAGTGA CTACATTTCT AAGAAATTGG TTGCAGCTGG	4140
TGTCCTCAC GAAGTCTTGA ATGCCAAAA CCACTATAGA GAAGCCCAA TCATCATGAA	4200
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CAAGCTTGGT GAAGGTGTTT GTGAACTTGG AGGACTTTGT GTTATTGGTA CAGAACGTCA	4320
TGAAAGTCCG CGTATCGATA ACCAGCTTCG TGGACGTTCA GGTCGTCAAG GAGATCCAGG	4380
TGAGTCACAA TTCTACCTAT CTCTTGAAGA TGATTTGATG AAACGTTTTG GTTCTGAACG	4440
CTTGAAGGGA ATCTTTGAAC GCTTGAACAT GTCTGAAGAG GCCATTGAGT CTCGCATGTT	4500

GACGCGTCAG GTTGAAGCAG CTCAGAAACG TGTCGAAGGA AATAACTACG ATACCCGTAA	4560
ACAAGTCCTT CAATACGATG ATGTCATGCG TGAACAACGT GAGATTATCT ATGCTCAACG	4620
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TAACGCGGTT GGA CTTCGTG GCTATGCTCA GAACAACCTT GTTGTGAGT ATCAGGCAGA	5040
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GATTGGACGC AATGAACTTT GCCCATGTGG TTCTGGTAAG AAATTTAAAA ACTGTCACGG	5280
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GTAATCGGGC CATGCTCATC TGACAACGAA GAAGCTGTCC TTGAATACGC TAAGCGTTTG	5580
GCAGTCCTAC AAGAAGAAGT GGCAGATCGT ATCTTTATGG TTATGCGTGT TTATACTGCC	5640
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GCGCCTAGTC TTATCAATGG AATCAAAGCC GTTCGCCATC TTCACTATCG TGTCATCACA	5760
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GTGGCAAGTG GGGCAGGATT TTCTACTGGT TTTAAAAATC CAACCTCTGG AAATCTCAAT	5940
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TATGGAAAAA ATATTCCCAA CTACTATTAT GACAATTTAA TTGATACCAT TGCCCAGTAT	6120
GAGAAAATGG GCTTGAAAA TCCTTTTATC ATCATTGATA CCAATCATGA CAATTCTGGT	6180
AAGCAGTATA TTGAACAGAT CCGAATTGTC CGCCAGACCT TGATTAACCG TGCTTGAAT	6240

960

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GATCTTGGTG	GATGACTTGG	TCAGCTACCA	TGCCGTTGGA	GCTCGTTCTG	TGGAAGACCA	6900
AGAGCACCGC	TTTGTGGCTT	CTGGGATTGA	TGCACCAGTA	GGGATGAAAA	ATCCAACCTC	6960
AGGAAATTTG	GGTGTATGT	TTAACGCCAT	CTATGCTGCT	CAAACAAGC	AAACCTTCCT	7020
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AGCAGTCAAC	GAGTATGGCA	ATTATATGCC	GAATTACTAC	TATGAAAATC	TACTCCAAGC	7140
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TCGTGATTGG	AATGAGAAAA	TTAAAAAGAC	GGTTCGAGGA	TTTATGATTG	AATCTTACCT	7320
AGCAGATGGT	CGTCAAAACC	AACCAGAGAT	CTTTGGTTGC	TCTATTACTG	ACCCTTGCCCT	7380
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GGCATTAGCA	AGCTCGGTTT	TCAGGATTTG	GAAGTCTTGA	ACAATGAACG	TGGGGCGCCT	7740
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CAAGGCTCTG	ATTCACTCTG	GAGCTATTCTG	ACAAAATATT	CAGCAAATGG	GGGCTCATAT	7920
CCCTCAAGGA	ACGCTCAAGT	TGGCTGTGGT	TAAGGCCAAT	GCTTATGGTC	ATGGAGCTGT	7980
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961

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AATCGAAGCT GTTGCTCTAG CTAAAGAATA TGAAGGAAATC TTTACCCACT TTGCTACTGC	8160
GTGGATTCAA GCACTCTTAG ATAAGGAAGT GGACCTAAGT GGATTGACAG TCCACCTCAA	8220
GATTGATTCA GGGATGGGAC GGATTGGTTT TAGAGAGGCA AGTGAGGTTG AGCAGGCTCA	8280
AGATTTGCTC CAACAACACG GTGTTTGTGT TGAAGGAATC TTTACCCACT TTGCTACTGC	8340
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GATGGACCAA ATCACTATTC GATTGCCTAA GCTTTATCCG CTAGGAACCA AGGTAACCTT	8820
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CATTAACTAT GAGGTGGTTT GCCTCCTCAG CGACCGTATT CCGAGAGAAT ATTATTAGAA	8940
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AGCTCAGGAA AAGAGTTTGC AGGAAATTTT AACTGATATG AAGTCCGACC ACCACATGAA	9780

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TCGTCTCCTA	CAAGGGGATG	TGGGGAGTGG	AAAAACGGTA	GTCGCTGGCT	TGGCCATGTT 9840
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GATTATTATC	GATGAGCAGC	ACCGTTTGG	TGTAGGGCAA	AGGCGTATTT	TACGGGAAAA 10140
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CAACGTTCCT	AATGCGACTG	TCATGATTAT	CATGGATGCC	GATCGCTTCG	GTCTCAGTCA 10620
ACTTCACCAG	CTTAGAGGTC	GTGTCGGTCG	GGGGGACAAG	CAGTCCTACG	CTGTTCTCGT 10680
TGCTAATCCC	AAGACGGATT	CTGGGAAAGA	CCGCATGCGT	ATCATGACAG	AAACGACCAA 10740
TGGATTTGTC	CTTGCGGAGG	AAGATTTGAA	AATGCGTGGT	TCTGGTGAGA	TTTTTGGAAC 10800
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AGAAGAAGCA	AGAAAGGTTG	CTAGCTACAT	TAGTTCTATA	GAAGCTTGGC	AAGAAGATCC 10920
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CGTGGTTTGA	AGAGATTTTC	GAAGAGTATT	AAGCTAGTTT	TTAGGTTTGG	CTCTTATACT 11220
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CGATTACAAA	ATAAAAGGAG	CATGCTATGA	AAAATCCAGC	TTTGCTAGAA	GAAATTAAGA 11520
CCTATAGAGG	AAGGGATGAG	GTTCCGGAAG	ACTTTGATGA	TTTCTGGGAT	GGGGAAGTGA 11580

963

AAAATGTTTC CACGCTTCCA TCCTACCACT TGGAGGAAAG AGATTTCAC ATTCCTCAAG	11640
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AGAAGCGTCT TTCTAGCTAT GGTGCCTCAC AAGGAGGGGC TCTAGCTCTA GTTGCAGCAG	12060
CGCTCAATCC TCGAATTCAG AAAACAGTTG CCATTTATCC CTTCTTGTC AACTTCAGAC	12120
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TTCACGACCC CTTCCATGAA ACAGAGGAGG AAATCATGGC GACCCTTGCC TATATCGATG	12240
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ACAGTCAAAT CGATTCTTAA CAATGTTTTA GAAACAAATG TGTACTATTC TAGTGTCAAT	12660
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TCAGAAAGCA AAAGCCGATA CCTATCGAGT AGGGTAGTTC TTGCTATCGT CAGGCTTGTC	12780
TGTAGGTGTT AATACTTTTC AAAAATCTCT TCAAACCACG TCAGCTTCGC CTTGC	12835

(2) INFORMATION FOR SEQ ID NO: 142:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 5020 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 142:

GGGGATATGA AGAACAAAAG AATATTTAAA GACTTCCAAG CTTCAAAAAT GAGTTTAAAC	60
ATTTACACAA GCCCCTTGTT AGCCTTTGTT TTTGTCTTCA TAGGAGAGTT TGTGGCTTTT	120

964

ACTTTGTATG GTATTGGCTT GTTAGCTCTC ATCGGACTTG CTAGAAATTT TGGAGAGGCT	180
GGTCAAAATC TTGCAAGCTA CTTGCAGACC TTGCATCAGA GCTTGACGGA TAAACAAGT	240
GACTTTCGTT TAATTTTAGG ATTACTGGCC TTTGGTTATT CTTAACACTG TGTTCAGATG	300
GACAAGAAAA GTTGAGAAAA GACCTATTCG AACCTTGGGA TTTTATAGAG AGAATTCCTT	360
CAGCAATCTT CTGAAAGGAT TTAGTCTAGG CCTGGCACTT TTTCTTCTGA CCTTGTTAGG	420
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CTTTGTCGTC TTTACTATCC CATTTTGGAT TTTACAGGGG ACAGCAGAAG AAGTGGTGGC	540
CCGTGCTTGG CTACTTCCTC AATTGGCCTC AAGAACCAAT CTAAACTAG CTATTCTTAT	600
ATCTAGCCTG TTCTTTACCC TGCTTCATAT GGGCAATTCT GGTCTCACCC CTCTATCTCT	660
AGTAAATCTC TTTTATTCG GAGTTGCCAT GGCTCTTTAC CTTCTCAAAA CTGATACAGT	720
TTGGGGTGTT GCAGGTATTC ATGGTGCTTG GAATTTTGCT CAGGGTAATC TCTTTGGGAT	780
TTTAGTTAGT GGTCAACCGT CAGAACGTCT CTGATGACCT TTTTACCACA AGGCAATCAA	840
GATTGGCTAT CAGGTGGTTC TTTTGGCATA GAAGGTTCCA TTATGACAAG TCTGGTATTA	900
CTACTGCTGA TTGTCTATCT TGCTAATAAA TTAAAGAAAG AAAATGAAAG GATGTGACTT	960
CGGTCCGTCC TTTTCTTCGT GAAAATACTA TAAGTATGCT AAAATAGGAA TAGCACATGG	1020
AGAGAGGATT CTTATGATCA ATCACATTAC AGATAATCAA TTAAACTAG TATCAAAATA	1080
TCAACCATCA GGAGATCAAC CCCAAGCTAT CGAGCAGTTG GTGGATAACA TTGAGGGGGG	1140
AGAAAAAGCT CAGATTCTGA TGGGGGCGAC TGAACAGGG AAGACCTATA CTATGAGTCA	1200
GGTCATTCTT AAAGTCAATA AACCAACTCT GGTTATTGCC CACAATAAAA CTCTGGCTGG	1260
TCAGCTCTAT GGGGAGTTTA AGGAATTTTT CCCTGAAAAT GCAGTTGAGT ATTTCTGATC	1320
CTACTATGAT TATTACCAGC CAGAGGCCTA TGTCCCTTCT AGCGATACCT ATATTGAGAA	1380
GGATAGTTCT GTCAATGACG AGATTGACAA GCTTCGCCAC TCAGCTACCT CAGCCCTTTT	1440
GGAGCGTAAT GATGTTATTG TCGTGGCCTC AGTCTCTTGT ATCTATGGTT TGGGTTGCC	1500
CAAGGAATAC GCTGATAGTG TCGTTAGTCT CCGTCCTGGT CTAGAGATTT CTCGTGATAA	1560
ACTCTGAAT GACTTGGTCG ATATTCAAGT TGAACGTAAT GATATTGATT TCCAACGCGG	1620
AAGATTTTCG GTTCGTGGGG ATGTGGTAGA GATTTTCCCA GCTTCCCGAG ATGAACATGC	1680
CTTTCGAGTA GAATTTTTTG GAGACGAAAT TGACCGTATT CGTGAAGTTG AGGCTCTGAC	1740
AGGTCAGGTG TTGGGAGAAG TGATCATTT AGCGATTTTC CCAGCGACAC ACTTTGTGAC	1800
CAATGACGAC CACATGGAAG TTGCCATTGC AAAGATTCAG GCCGAGTTGG AAGAACAATT	1860
AGCTGTCTTT GAAAAGGAAG GTAACTGCT TGAAGCCCAG CGTTTGAAAC AGCGGACAGA	1920

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GTATGATATC	GAAATGTTGC	GTGAGATGGG	CTATACCAAT	GGGGTTGAAA	ATTATTCCTCG	1980
CCACATGGAT	GGACGGAGCG	AAGGAGAGCC	TCCTTATACG	CTTCCTCGACT	TCTTCCCAGA	2040
TGATTTCTTG	ATTATGATTG	ACGAGAGTCA	TATGACCATA	GGGCAAATCA	AGGGCATGTA	2100
CAATGGAGAC	CGTTCGCGTA	AAGAAATGCT	GGTTAATTAT	GGTTTCCGTT	TGCCGTCTGC	2160
TTTGGACAAT	CGTCCTCTCC	GTCGGGAGGA	GTTTGAGAGT	CACGTTCATC	AGATTGTTTA	2220
CGTTTCAGCG	ACACCTGGTG	ACTATGAAAA	TGAACAGACC	GAGACAGTGA	TTGAGCAAAT	2280
CATTCGTCCA	ACGGGACTCT	TGGATCCAGA	GGTGGAAGTC	CGTCCGACTA	TGGGACAGAT	2340
TGATGACCTC	TTGGGTGAAA	TCAATGCCCG	CGTTGAAAAA	AATGAGCGTA	CCTTTATCAC	2400
AACTTTGACC	AAGAAAAATGG	CAGAGGATTT	GACCGACTAC	TTCAAGGAAA	TGGGTATCAA	2460
GGTCAAGTAC	ATGCACTCGG	ATATCAAGAC	CTTGGAACGG	ACGGAGATTA	TCCGTGACCT	2520
GCGCTTGGGT	GTC'TT'GATG	TCTTGGTCGG	AATTAACCTG	CTCCGTGAAG	GAATTGACGT	2580
TCCTGAAGTG	AGCCTCGTAG	CTATTCTCGA	TGCTGACAAG	GAAGGTTTCC	TTCGCAACGA	2640
ACGTGGACTC	ATCCAGACCA	TTGGACGTGC	TGCACGTAAT	AGCGAAGGTC	ATGTTATCAT	2700
GTATGCGGAC	ACGGTTACCC	AGTCTATGCA	ACGTGCTATC	GATGAAACTG	CCCGCCGTCG	2760
CAAAATCCAG	ATGGCCTATA	ATGAAGAACA	TGGTATCGTT	CCACAAACCA	TCAAGAAAGA	2820
AATCCGTGAC	TTGATTGCTG	TGACCAAGGC	AGTTGCTAAG	GAAGAAGACA	AGGAAGTCGA	2880
TATCAATAGC	CTCAACAAAC	AAGAGCGCAA	AGAACTAGTC	AAAAAGCTTG	AGAAACAAAT	2940
GCAAGAAGCA	GTTGAAGTGC	TTGACTTTGA	ACTAGCAGCT	CAGATTCTGT	ATATGATGCT	3000
GGAAGTCAAG	GCCTTGGATT	AGGGGAATAG	TATGATTTAT	TTAAGAAAGT	TAAAGAAAGA	3060
AGATTGATG	TCTTTATGGG	AAATGGCTTA	TTCACAGCTT	AATCCAGTTT	GGAAACAGTA	3120
TGATGCTCCC	TATTATGATG	ATTATCAGTA	TTTTTCAAAT	TTTAAAGAAT	TCGAACTACA	3180
AAAATCAGAA	TCCATTTTAA	GCAACTCAAA	TCGCCTTGGT	ATTTTGTGTT	ATGATAAACT	3240
AGTTGGGACT	GTTTCGCGTT	ATTGGGTATG	TAAAGAAACA	AGATGGATGG	AATTGGGAAT	3300
TGGTATTTAT	GATAAAAAAT	TCTGGAACAC	TGGTATTGGG	AAAGTTGCTA	TGTTGCAGTG	3360
GATAGATAGG	ACGTTTCAGG	ATTACTTGGA	GTTGGAGCAT	CTGGGTTTGA	CAACTTGGTC	3420
AGGAAATATT	GGTATGATGA	AACTTGCTGA	AAAATTAAGA	ATGAAAAAAG	AAGCTCATAT	3480
TCCAAAAGTT	CGTTATTATC	AAGGTAAATA	TTTGACAGT	ATTAAATATG	GTATTTTGAG	3540
AGAAGACTGG	GAGAAAATAA	ATGACGGTTA	TTATCAAATC	AATGGAAACT	CCTGAAGAGA	3600
TAGAAGGTAA	ATCCTTCGTT	CACTGGCAAA	CGTGGAGAGA	GGCTTATGAT	GACCTTTTGC	3660

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CTGCGGAATT TCAGGAGACA ATGACATTAG AAAGATGTCG ACTCTTTAGT CAAAAGTATC	3720
CAGAAAATAC ATTGATTGCG ATGGATGGTG TGAAGATAGT TGGTTTTATA AGTTATGGCA	3780
ACTGTCGTGA TGAGACTATT CAAGCTGGTG AAATTATTGC TTTATATGTT TTAAAAGACT	3840
ATTATGGAAG AGGAATCGCA CAAAAGTTAG TGAAGCAGC TTTGACTGAT CTTAATCATT	3900
TTTCTGAAAT TTTCTTATGG GTATTGAAAG ATAACAAGCG CGCCATTGCT TTCTATCAAA	3960
AAATGGGTTT TACTTTTGAT GGACAAGAAA AAATACTTGA ACTTGGAAG CCTATAAAGG	4020
AAAAACGGAT GGTATTCTAT TCTAAATAAT TCTCAAAAGT AAAAGCTAAT ATGGTACCAA	4080
GTCTGAAAAA TTAATAAATT AGAAAGCGAG TAAATTTATG TCCCGTTCCC AATTAACAAT	4140
TTTAACAAAT ATCTGTCTGA TTGAAGACCT CGAACTCAG CGCGTGGTGA TGCAGTATCG	4200
CGCCCCTGAA AACAAATCGCT GGTCTGGTTA TGCCTTTCCT GGAGGTCATG TAGAAAATGA	4260
TGAGGCTTTT GCGGAGTCTG TCATTCTGTA AATCTACGAA GAAACAGGGT TGACTATCCA	4320
AAATCCTCAA CTTGTCGGCA TTAAAAATTG GCCACTAGAT ACAGGTGGGC GCTATATTGT	4380
CATTTGTTAT AAGGCGACTG AGTTCTCTGG TACCCTTCAA TCTTCAGAAG AGGGAGAAGT	4440
TTCTTGGGTG CAAAAAGACC AGATTCCAAA CTTAAATCTG GCCTATGATA TGCTACCATT	4500
GATGGAAATG ATGGAAGCTC CCGACAAGTC AGAGTTTTC TACCCTCGCC GTACAGAAGA	4560
CGATTGGGAA AAGAAAATCT TCTAGTCTTT TACTAAATAA CCTAGCTGAT CCAAGGCCTC	4620
CTCGATATAG TGGAGGTCTT GTTGTGTCTC GGCTTCAACT AGGTGATAAT GAATACCATC	4680
TGTTAACTCA GAAATTGGCT TAAAGTCAGA ACGTTCAACT TGTTCTAGAA AATGTTGCAC	4740
GTCGCGGCGA CAGGTCAGTT TTAGTAAGGT TTCAATCTCT CCATAAACAG GATGATCAAT	4800
CAAGATATTT TGAACGCGAC CACCATTATC TACGATAGCA AGTAATTCTC GTCCAATTTT	4860
TTCAACTTCA TGCTTGACCT TAAATAATTT GTGATGATAA GTATTTGCAT TAGCATCTTT	4920
ATAGATATAA CCACGATTGG TAGATAGAAT TGGAGATCCA TCAGCTCTTA AAATTGCAAT	4980
ATCTTGAACA ATAAGTTGTC GAGTGACATG AAAGTGCTCA	5020

(2) INFORMATION FOR SEQ ID NO: 143:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 4965 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 143:

AAAAAGTGGC AATCCATTGA TTGGCCACTT CATTTAGAGA ATTATCGTCT CGCCCTTGAA	60
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GAAGAAGGTC GTGTAGTACT TGAGTTACTG CTATCGCTAG AACTACTACT TGAAGTCTG	120
GAGCTGGATG GAGTTGGTAG ACTCCCCACA ATACTAGACC AAGCATTCTG ATAATCCGCA	180
TCACTTCCGC CAATAGCAAA GCGATAACTT GTCGCTGGCG CTCCTGACTT ATTAGCCCAA	240
TAGCTGGTAA CAGTCGAACC TGTGACCTCT ACTTCTTTTC CTTCAACAGA AACCTTCTCT	300
GGTTTTTGAC CTGTTGATTT CAAGACTTCC GATTTCACTA CACTAGGATC TAAAGCAAAG	360
CGCTCGTTCC CCCAAATGCT TGGGAAGCT TGCTGAATCG CATTTACCAG ATGAGCCATG	420
TAATTAGAGT TATTAGAATA ACCTGCTCTA CGTGACAATG AATGATTATC ATCATGCCCA	480
ATCCAGCCAC CTAGGGTTAA TCTAGGTGTC GAAAGCATGA GCCACATATT TTCGTCTTGG	540
TTGGTTGTAC CAGTCTTCCC AATCCAATCT GCATTAGCCA GAGTAGGATT TAAAGAAGTC	600
AGGTTAGACT TGAAGGTTGT TGTCACACGA GAGGATAGAA CTTCTCGTAG CAATCCCTGC	660
ATAATCGTCG CAGTAGCTTT TGAATAGACT TGAACCGGTT TATCCTGATA CTCATACACC	720
ACTCTACCAT CTGCTGCTTC AATCTTTGAA ATCACATGCT TCTGATGATA AACTCCATTA	780
TTAGCTAAGG TCTGATAGCC ATTGGTATGC TGGGCAACTG TGACTTCAAT ACCACCACCC	840
ATTGGCAAGC TCTCAATACC GTACTCAGGA ATCTCGTAAC CCATCTTTTC CATATAACCC	900
TTGACATCAA CACCCTTTTC ACGGAGCATA CGATAGGTCC AGTAAGCAGG GATATTCCAT	960
GAATAGTTCA GAGCTTCTCC CAAGGTCATC ATTCTGTTC CTTGCTATT AGCATACATA	1020
ATCGGATTGC CATTAGCAAA GTTTGTTGGA TAGTTAGATA GAATCGTTTC ACTTCCCATC	1080
AAGCCCTGGT CAATAGCAAT ACCGTAGGCC AGCAAGGGCT TGGTAGTAGA AGCTGGCGAA	1140
CGTTTGGTAT CAAAGGCATG ATTATTTTGA TTTTCTTGAT AATTACGACC ACCTACAAAG	1200
CCTAGAAATG CACCTGTTTG GTTATCCATC AAGACATTCC TACTTCTAC ACGACCTGTT	1260
CCATCGTCTA AAAGATAGCC ATAATCAGCA ACCGCACTTT GCATGGCAGA ATGAATTTTC	1320
TGATCTATGG TAGTAGTAAT CTTATAACCA CCATTTTCAA TTTCTTGGC TGCCAAATCT	1380
CGATAAACT TCTGAGTTGC CTCATTTTTC AACTCCTTAG CGGAGACATT GTCTCTCTGA	1440
GCTAGATAGT CATACTACG TTCTTGAGCT TCTGCCAAAG TTGTAAAGTA TAAATAGTCT	1500
CGTGAAATTC CTGTAACCGT GCCCGATGGT AAAAAGTCCT GTTTAAGGTC ATAATCCTTG	1560
TACTGAGAAT ACTCGTCTTT GCTTAATGCA CCTGTACGAT ACATACTGTA AAGAACTGCC	1620
TTAGCCCGTC TTAAGCCAAT TTCTAGGTCT TCATCACTCT TCAACTCCCC AGTATTTTCA	1680
TAAGGAGAGT AAGTAATGGG ACTCTGTGGA AGTCCTGCTA AAAATGCTGC TTGAGGAACA	1740
GTCAACTGAC TGGCATCTAC ACCGAAAATT CCCTCAGCTG CTGCGGAGC CCCTGCAATA	1800

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TTCTGTCCCT	TATTATTTCG	GCCAAAGGGA	GCCACATTGA	GATAGGTCGT	TAAAATCTCA	1860
TCTTTATCA	TGGCGCGTTC	CAAGGCAAGA	GCATCCACAA	TCTCTGCCGC	CTTACGAGCC	1920
AAGGTCGGCG	CATCCCCAAC	CACCTGCTGT	TTAATTAGTT	GCTGGGTCAA	GGTTGAACCC	1980
CCACTAGAGG	AACCCAAACC	TACAAATTTC	CCCAAGGTCG	CACGAATCAC	CGCCTTGGGT	2040
ACTACACCCT	TATGTTCTTT	AAAGTGTTCA	TCTTCTGTCG	CAATGATAGC	CTTCTTCAGA	2100
TTTTCCGAAA	TTTGCTCAGA	TGAGATAGAA	GTGCGCAACA	AATCACTCTC	TATGGAAGCA	2160
ATCACCGTCC	CGTCCGAATA	GGTAATCTCT	GAAATAGAAG	AGATGTCCTT	GACCTGATTC	2220
ACCAATTCTT	CTGTCTGAGG	CACCCGAACC	TTGTCAAATA	AGGCCACTCC	GTATCCCAAA	2280
GCAATCCCAG	CTCCCAACAT	TCCTCCTAGA	AAACCGAGTA	CAAAGAGTAA	GTAAATAAG	2340
GCTTTTATAC	TCAGTAAAT	AGCTGGGAAA	ATGACTGACT	TATCTAAGGT	TTTAGATTTT	2400
TTGGTACTTG	AACCTTTCTT	GCCAGGTCTA	GCTGATTTT	TATTTTTTTG	TTTTTGCTGG	2460
AAAAATTCCA	GCATTTTTTCG	TTTTAATTCA	TTTAATTGAT	TTTGCATGGA	TTTCCTCACT	2520
TTATCTATTA	TACCACAAAA	GGGAAATTTT	CAATAAAATA	GCCACTTCT	TCCCTATTCT	2580
GCTAGGCTAT	TGCCCAAGTT	TGTGATACAA	TAGGTAGAAA	CAATAATTTT	AAAAAGGAGA	2640
AAAAACACAT	GCACATTTTT	GATGAGCTAA	AAGAGCGTGG	TTTGATATTT	CAAACGACTG	2700
ATGAAGAAGC	TTTGCGTAAA	GCCCTAGAAG	AAGGTCAAGT	TTCTTATTAT	ACTGGCTACG	2760
ATCCAATGCG	TGACAGCCTT	CACCTAGGCC	ACCTTGTCGC	AATCTTGACA	AGTCGTCGCT	2820
TGCAACTAGC	AGGTCACAAA	CCTTATGCGC	TCGTTGGCGG	TGCTACAGGT	CTCATCGGAG	2880
ATCCGTCCTT	CAAAGATGCT	GAACGTAGTC	TCCAAACAAA	AGACACAGTA	GATGGCTGGG	2940
TCAAGTCTAT	CCAAGGACAA	CTTCTCGTT	TTCTTGACTT	TGAAAATGGC	GAAAACAAGG	3000
CTGTCATGGT	CAACAACTAC	GACTGGTTTG	GCAGCATCAG	CTTCATTGAC	TTCTCCGTG	3060
ATATTGGAAA	ATACTTCACG	GTCAACTACA	TGATGAGTAA	GGAATCTGTT	AAAAACGGA	3120
TCGAAACAGG	AATTTCTTAC	ACTGAGTTCG	CTTACCAAAT	CATGCAAGGG	TATGACTTCT	3180
TCGTCTTAA	CCAAGACCAT	AATGTCACTC	TTCAAATCGG	TGGTTCTGAC	CAGTGGGGAA	3240
ATATGACAGC	TGGTACCGAA	TTGCTTCGTC	GTAAGGCGGA	CAAGACTGGT	CACGTTATCA	3300
CTGTTCCACT	AATCACAGAT	GCAACTGGTA	AGAAATTTGG	TAAATCAGAA	GGAAATGCCG	3360
TCTGGCTCAA	TCCCGAAAAG	ACTTCTCCAT	ACGAAATGTA	CCAATTCTGG	ATGAACGTGA	3420
TGGACGCTGA	CGCTGTTGCG	TTCTTGAAAA	TCTTTACTTT	CTTGTCACTT	GATGAGATTG	3480
AAGATATTCG	TAAACAATTT	GAAGCAGCGC	CACACGAACG	CTTGGCTCAA	AAAGTCTTGG	3540
CTCGTGAAGT	TGTTACACTT	GTTCACGGAG	AAGAAGCCTA	CAAAGAAGCA	CTTAACATCA	3600



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CTGAGCAACT CTTTGCAGGA AACATCAAAA ACCTTTCTGT CAAAGAGCTC AAACAAGGAC	3660
TTCGTGGTGT GCCCAACTAC CAAGTACAGG CAGACGAAAA CAACAATATC GTGGAAGTGC	3720
TCGTCTCATC TGGTATAGTT AACTCAAAAC GCCAAGCCCG TGAAGACGTC CAAAACGGAG	3780
CCATCTACGT AAACGGCGAC CGCATCCAAG AGCTTGACTA TGTCTTGAGT GACGCTGATA	3840
AGTTAGAGAA TGAAGTACT GTTATCCGTC GTGGGAAGAA AAAATACTTT GTATTGACTT	3900
ACTAACTAT TCAACATTTA TCTATAAACA AAGGAGTTAA CCTCGAGAAA GGTAACTCCT	3960
TTTTGTGTT AATAACTCTC ATCTATCTAT TTTTAATAGA CAGGCTACGC AGGACAATGC	4020
GCAAGGTTGT TAGATTATGT AAGATAGAGA GATTTGAAGG ACTGAACCAA TTAAATAAGC	4080
CAAAGCCAAT CAAACTACTA TTTACGACAA CGGTATCCTG AATATTTTTC TTGATGAGTG	4140
TTTGCAAAGA TGATGATAAC GAATCCAAC CTTGGAAGAA ATCCAAACGA TTATCTAACA	4200
ATAAGATATC ACTCATCTGC TTAGAAATAT CTGCATCTC ATTCATCACC ACACCGATAT	4260
CTGATAGAGT TAAAGCCGCT GAGTCATTCA ATCCATCTCC AACCATCAA ATAGTGTGAC	4320
CTGCTTTCTG CAGTTTCTCT ACTAACTCAA ATTTCCCATC AGGTTTCAAG TCTGTATAGA	4380
CCTGATCAA GGGCAAATCT TTGACTAATT CCTCTGTCCT AATCAAGGTG TCTCCTGTTG	4440
CCAGAATCAA TTTTTTCCCC TGTGCCTTAA GTTTATCCAA GGCTGTTTTT GCTTCTTTTC	4500
TCAAAGGAGT ATGAATGCAG AACATTCCAA TCAATTCATT TTGATAAGCC AAGAATAAGA	4560
GATTGTTAGT ACTCTTGAC TCTTCAATTA AAGCATTTTG TTCTGAACTG ATATGAATCT	4620
GCTCATCCTG CATCAAGACA TAATCCCAA TAAGAACTGG TTGGCCATCT ATATGAGATT	4680
TGATCCCCTT GCTTGCGATA TATTGGAGTT TCCCATGCAT TTCCTCATGT TCAATTCCTT	4740
CTATCTCAGC TTGCTTGACG ATGGCATTAG CAATAGGATG ATAAATGTGT TCCTCAAGAC	4800
AGGCACTGAT TCTGAGAATA TCTTCTCAC TATAGTCTCC AAAAGGTAAC ACCTTTTCAA	4860
CTATAGGATA ACTAGTTGTG ATTGTTCTG TCTTATCAAA CAAGAAAGTA TCAACTTCCA	4920
GATATTCTC CCTGTTGTGG CCTCTGGCTG TCATCTCTGT GCTGG	4965

(2) INFORMATION FOR SEQ ID NO: 144:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 3232 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 144:

970

CAGGGGCGTA TTACGTGACA ATTCAATGTA GGCTGTCGCT ACTTGCGCCA AAACAAGGAT	60
TCGATAATGT CGGATGATAC TAACGATTAA ACCGAGCAGA AAGGATCCCA AAATTCCTCCA	120
AACTGCAATA TGCAAGGTCA GAAAGAATGC CTTTTGATAT AGTGGTAGAT ATTGTTCAAC	180
AATGGATCAA TCCAAAAATA GAACCTCCCA TCTAGAAATA ATACAGTTAT TGTAGCACTT	240
AAAATCTTCT TTGGATAATA TCTATTTTTT ATTGCCGTTA TAAGGATTTT TATCATAGAC	300
ATAAAATTTT TGAAATTTCC AAACAAAATA TTTTAAAAGT TTTGAAAAAG AGTTAAGATA	360
TTTTTGTAAAT ACACAAAGTA AACGCTTACT TATTAAGGAG GACATTTTAT GTCATACAAA	420
ACAAGCAATG CAGAAGGTCA TGTAAGTTTC ATCAATACCT ATGATTGGGA GCCAATGGCG	480
CAACAAGTTA TTCCTAAAGC AGCATTTGGC TATATCGCTA GTGGGGCGGG AGATACTTTC	540
ACTTCTTTCC AGTGATTTTA GCGTCAGGTT CTTTTAGTT TTTAAAGATT ATCCGTGAAT	600
TTCTTGCTTA TTTATGATAA AATGGGAGTG TCGCAAAAAA TGACTCATCG TATTCAATTT	660
TGAGTAAAC TAGGAGGATC CCATGTCTAC AGAACATATG GAAGAACTAA ATGACCAGCA	720
GATCGTTTCG CGTGAAAAA TGGCTGCGCT CCGCAACAA GGAATCGATC CTTTCGGA	780
ACGTTTTGAA CGTACTGCAA ATTCACAAGA ATTAAAAGAT AAATATGCCA ACCTCGATAA	840
AGAACAATTA CACGATAAAA ACGAAACAGC TACTATCGCA GGACGCTTGA TAACCAAACG	900
TGGTAAAGGA AAAGTTGGTT TTGCCCACCT TCAAGACCGC GAAGGCCAGA TTCAGATCTA	960
CGTTCGTAAG GATGCTGTCG GTGAAGAAA CTACGAAATC TTCAAAAAAG CAGACCTTGG	1020
TGACTTCCTT GGTGTCGAAG GTGAAGTAT GCGTACGAT ATGGGAGAAC TCTCTATCAA	1080
GGCAACCCAC ATCACACACT TGTCTAAGGC TCTTCGTCCT CTTTCCTGAGA AATTCATGG	1140
TTTGACAGAC GTTGAAACAA TTTACCGTAA ACGTTACCTT GACTTGATTT CTAATCGTGA	1200
AAGCTTTGAA CGCTTTGTCA CTCGTTCAAA AATCATCTCT GAAATCCGTC GTTACCTTGA	1260
CCAAAAAGGA TTCCTTGAA TGGAAACACC TGTTCTTCAT AATGAAGCCG GTGGTGCTGC	1320
TGCCCCGTCCA TTTATCACCC ACCACAATGC CAAAACATT GACATGGTGC TTCGTATCGC	1380
GACTGAGCTT CACTTAAAC GCCTTATCGT GGGTGGTATG GAACGTGTCT ATGAAATTGG	1440
CCGTATCTTC CGTAACGAAG GAATGGACGC TACTCATAAC CCTGAGTTCA CTTCTATCGA	1500
AGTTTACCAA GCTTATGCAG ACTTCCAAGA CATCATGGAC TTGACTGAAG GCATTATCCA	1560
ACACGCTGCT AAATCAGTCA AAGGTGATGG CCCAGTCAAC TACCAAGGTA CTGAAATCAA	1620
GATTAACGAA CCATTTAAGC GTGTTTATAT GGTGGATGCT ATCAGAGAAA TTTACTGGTGT	1680
CGATTTCTGG CAAGACATGA CTTTGAAGA AGCTAAAGCT ATCGCTGCTG AGAAGAAAGT	1740
TCCAGTTGAG AAACACTACA CTGAGGTTGG TCACATCATC AATGCCTTCT TTGAAGAGTT	1800

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TGTTGAAGAA ACTTTAATCC AACCAACCTT TGTCTATGGA CATCCAGTAG CTGTATCTCC	1860
ACTCGCTAAG AAAAATCCTG AAGACCAACG CTTTACTGAC CGTTTCGAGC TCTTTATCAT	1920
GACTAAGGAG TACGGTAATG CCTTTACTGA GTTGAACGAC CCAATCGACC AACTTAGCCG	1980
TTTGAAGCC CAAGCTAAAG CCAAAGAACT TGGTGATGAT GAAGCGACAG GAATCGACTA	2040
TGACTACATT GAAGCTCTTG AATACGGTAT GCCACCAACA GGTGGTTTGG GAATCGGTAT	2100
CGACCGTCTC TGCATGCTCC TCACTGATAC AACAACTATC CGTGATGTAT TGCTCTTCCC	2160
AACAATGAAA TAAATTCTTA TCCTCTGGGT CTTATCAGAG GATTTTTTGA TTCAAAAAGA	2220
GACTGAATTT AAGGAGAAAA TGAAGTGTAG TATATTGAAA TTGAAATAGT AACTTTTGAT	2280
TTCTAAGACA TTGTTAGAAA TTGGTTTAAA TTCCCTAAGC AATTTGTGCA TGTTTTATTT	2340
CATTTTACGA TAGTACGCTG AAACCTTTCA AAAAGTACTA GAAATTGACT TGGATTCCCC	2400
AATTGATTG TTCAGATTCA CTATAAATAA AAAATTAATA AGTGGGATAG GAAGTTAGCG	2460
TCAACTAGGA TAGTATCTTG CTAAACAGT ATATATGGGA TTGATATAAG TCCATAGGTC	2520
CTATTAGAGG ATGTTCTGGT GTCTTATTC CTTGTTTTTT ATAGTATTAG TAGATAGAAT	2580
CAGCAAATAA AAACCCAAAT CATTCATACC TCTCTCAACT AGATGTAAC TACAAAACCC	2640
CTGACCTCAT GAGCCACTTT CTCCTCCTC ATGAGGTCAG TTTTACTTTC TGCTGTTCCA	2700
GTATCGTTTT TCCTCGTAG ATTCCTCAA AAGGGCAGAC TCCTCCCTTG GTGCGTCACA	2760
CGATTTTTTC ATCTCGACTG TTCTTTAATG CATCATTAAC GACGCTTTTC TTCTAGGTGG	2820
TTCATAAGGA ACAGGAAGAT TCAGGTGAC TTTTCTAATC CTAGAATAAA GTGCTGAAAA	2880
CAATTCGGAA TAGGCATAGA GACTAGACAA TTTGAGGAGC TGCTTGCGTC CTGTTCGAAC	2940
ACATTTTCCC ACCACGTGAA GAAAAAGATG GCGGAAGCGT TTGATTGTTA AAGTTTGGA	3000
GTCACCTCCA GCTAGATGTT TGAGAAAAAG ATAGAGATTG TAGGCGATAC AGCTCATCAT	3060
CATACGAACT TCGTTTTTGA TTAAGGTTGA ACTATCCGTT TTATCGCCAA AAAATCCCTC	3120
CTTCATCTCC TTGATGAAAT TCTCGGCTTG ACCACGTCCA CGATAAAGCT GAAACTGGTC	3180
TTGGCTTGTT CCACTCGTCA TATTTGTAAC GAGAGAAATA ACATCGTAGA AC	3232

(2) INFORMATION FOR SEQ ID NO: 145:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 10711 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 145:

CCGGAGAAAA TGATGAAAAG TTCAAAACTA TTTGCCCTTG CGGGCGTGAC ATTATTGGCG	60
GCGACTACTT TAGCTGCATG CTCTGGATCA GGTTC AAGCA CTAAAGGTGA GAAGACATTC	120
TCATACATTT ATGAGACAGA CCCTGATAAC CTC AACTAT T TGACA AACTGC TAAGGCTGCG	180
ACACAAATAT TACCAGTAAC GTGGTTGATG GTTTGCTAGA AAATGATCGC TACGGGA ACT	240
TTGTGCCGTC TATGGCTGAG GATTGGTCTG TATCCAAGGA TGGATTGACT TACACTTATA	300
CTATCCGTAA GGATGCAAAA TGGTATACTT CTGAAGGTGA AGAATACGCG GCAGTCAAAG	360
CTCAAGACTT TGTAACAGGA TTAAAATATG CTGCTGATAA AAAATCAGAT GCTCTTTACC	420
TTGTTCAAGA ATCAATCAAA GGGTTGGATG CCTATGTAAA AGGGGAAATC AAAGATTTCT	480
CACAAGTAGG AATTAAGGCT CTGGATGAAC AGACAGTTCA GTACACTTTG AACAAACCAG	540
AAAGCTTCTG GAATTCTAAG ACAACCATGG GTGTGCTTGC GCCAGTTAAT GAAGAGTTT	600
TGAATTCAAA AGGAGATGAT TTTGCCAAAG CTCAGGATCC AAGTAGTCTC TTGTATAACG	660
GTCCTTATTT GTTGAAATCC ATTGTGACCA AATCCTCTGT TGAATTTGCG AAAAAATCCGA	720
ACTACTGGGA TAAGGACAAT GTGCATGTTG ACAAAGTTAA ATTGTCAATC TGGGATGGTC	780
AAGATACCAG CAAACCTGCA GAAAACCTTA AAGATGGTAG CCTTACAGCA GCTCGTCTCT	840
ATCCAACAAG TGCAAGTTTC GCAGAACTTG AGAAGAGTAT GAAGGACAAT ATTGTCTATA	900
CTCAACAAGA CTCTATTACG TATCTAGTTG GTACAAATAT TGACCGTCAG TCCTATAAAT	960
ACACATCTAA GACCAGCGAC GAACAAAAGG CATCGACTAA AAAGGCTCTC TTAAACAAGG	1020
ATTTCCGTCA GGCTATTGCC TTTGGATT TG ACCGTACAGC CTATGCCCTC CAGTTGAATG	1080
GACAAACTGG AGCAAGTAAA ATCTTGCGTA ATCTCTTTGT GCCACCAACA TTTGTTCAAG	1140
CAGATGGTAA AACTTTGGC GATATGGTCA AAGAGAAATT GGTCAC TTAT GGGGATGAAT	1200
GGAAGGATGT TAATCTTGCA GATTCTCAGG ATGGTCTTTA CAATCCAGAA AAAGCCAAGG	1260
CTGAATTTGC TAAAGCTAAA TCAGCCTTAC AAGCAGAAGG AGTCCAATTC CCAATTCATT	1320
TGGATATGCC AGTTGACCAA ACAGCAACTA CAAAAGTTCA GCGCGTCCAA TCTATGAAAC	1380
AATCCTTGGA AGCAACTTTA GGAGCTGATA ATGTCAATAT TGATATTCAA CAACTACAAA	1440
AAGACGAAGT AAACAATATT ACATATTTTG CTGAAAATGC TGCTGGCGAA GACTGGGATT	1500
TATCAGATAA TGTCGGTTGG GGTCCAGACT TTGCCGATCC ATCAACCTAC CTTGATATTA	1560
TCAAACCTTC TGTAGGAGAA AGTACTAAAA CATATTTAGG GTTTGACTCA GGGGAAGATA	1620
ATGTAGCTGC TAAAAAGTA GGTCTATATG ACTACGAAAA ATTGGTTACT GAGGCTGGTG	1680
ATGAGACTAC AGATGTTGCT AAACGCTATG ATAAATACGC TGCAGCCCAA GCTTGTTGA	1740

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CAGATAGTGC	TTTGATTAT	CCAACTACAT	CTCGTACAGG	GCGTCCAATC	TTGTCTAAGA	1800
TGGTACCATT	TACAATACCA	TTTGCATTGT	CAGGAAATAA	AGGTACAAGT	GAACCAGTCT	1860
TGTATAAATA	CTTGGAAC	CAAGACAAGG	CAGTCACTGT	AGATGAATAC	CAAAAAGCTC	1920
AGGAAAAATG	GATGAAAGAA	AAAGAAGAGT	CTAATAAAAA	GGCTCAAGAA	GATCTCGCAA	1980
AACATGTGAA	ATAACTGTTG	CAAAATATAA	GAAAGGATTT	AGTATTTCCC	TTGAATGCTG	2040
AATCCTTTTT	TACATTTGTA	AAGAAAGATT	CTAAATGTGA	CGGACCCCCA	AAAGTTGGAG	2100
CCTCTTTTTG	TCAGAATAGA	GAAAATTTTT	GTTAATTTTA	CTTGTTTCCT	ATTGCTTTCT	2160
CAGCTATTAT	TTGTTATAT	AAAAGTATAA	TTATTTTTTA	TTTATCAGAG	TTAAGCATTG	2220
CACTTTCAGA	GGAACGAGTA	TTTTTTAAAA	AGAAAATGTA	AACGTTTGCT	CAAAAATGAA	2280
AGGATTTAGA	AGTTTATGAA	TAAAGGATTA	TTTGAAAAAC	GTTGTAAATA	TAGTATTCGG	2340
AAATTTTCAT	TAGGTGTTGC	TTCTGTTATG	ATTGGAGCTG	CATTCTTTGG	GACAAGTCCG	2400
GTTCTTGCA	ATAGCGTGCA	GTCTGGTTCC	ACGCGGAAC	TACCAGCTGA	TTTAGCTACT	2460
GCTCTTGCAA	CAGCAAAAGA	GAATGATGGG	CGTGATTTTG	AAGCGCCTAA	GGTGGGAGAA	2520
GACCAAGGTT	CTCCAGAAGT	TACAGATGGA	CCTAAGACAG	AAGAAGAACT	ATTAGCACTT	2580
GAAAAAGAAA	AACCGGCTGA	AGAAAAACCA	AAAGAGGATA	AACCTGCAGC	TGCTAAACCT	2640
GAAACACCTA	AGACGGTAAC	CCCTGAATGG	CAAACGGTAG	CGAATAAAGA	GCAACAGGGA	2700
ACAGTCACTA	TCCGAGAAGA	AAAAGGTGTC	CGCTACAACC	AACTATCCTC	AACTGCTCAA	2760
AATGATAACG	CAGGCAAACC	AGCCCTGTTT	GAAAAGAAGG	GCTTGACCGT	TGATGCCAAT	2820
GGAAATGCAA	CTGTTGATTT	AACCTTCAAA	GATGATTCTG	AAAAGGGCAA	ATCACGCTTT	2880
GGTGTCTTTT	TGAAATTTAA	AGATACCAAG	AATAATGTTT	TTGTCGGTTA	TGACAAGGAT	2940
GGCTGGTTCT	GGGAGTATAA	ATCTCCAACA	ACTAGCACTT	GGTATAGAGG	TAGTCGTGTT	3000
GCTGCTCCTG	AAACAGGATC	AACAAACCGT	CTCTCTATCA	CTCTCAAGTC	AGACGGTCAG	3060
CTAAATGCCA	GCAATAATGA	TGTCAATCTC	TTTGACACAG	TGACTCTACC	AGCTGCGGTC	3120
AATGACCATC	TTAAAAATGA	GAAGAAGATT	CTTCTCAAGG	CGGGCTCTTA	TGACGATGAG	3180
CGAACAGTTG	TTAGCGTTAA	AACGGATAAC	CAAGAGGGGG	TAAAAACAGA	GGATACCCCT	3240
GCTGAAAAAG	AAACAGGTCC	TGAAGTTGAT	GATAGCAAGG	TGACTTATGA	CACGATTCAG	3300
TCTAAGGTCC	TCAAAGCAGT	GATTGACCAA	GCCTTCCCTC	GTGTCAAGGA	ATACAGCTTG	3360
AACGGGCATA	CTTTGCCAGG	ACAGGTGCAA	CAGTTCAACC	AAGTCTTTAT	CAATAACCAC	3420
CGAATCACCC	CTGAAGTCAC	TTATAAGAAA	ATCAATGAGA	CAACAGCAGA	GTACTTGATG	3480

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AAGCTTCGCG	ATGATGCTCA	CTTAATCAAT	GCGGAAATGA	CAGTACGCTT	GCAAGTTGTA	3540
GACAATCAAT	TGCACTTTGA	TGTGACTAAG	ATTGTCAACC	ACAATCAAGT	CACTCCAGGT	3600
CAAAAGATTG	ATGACGAAAG	CAAACTACTT	TCTTCTATTA	GTTTCCTCGG	CAATGCTTTA	3660
GTCTCTGTTT	CTAGTAATCA	AACTGGTGCT	AAGTTTGATG	GGGCAACCAT	GTCAAACAAT	3720
ACGCATGTCA	GCGGAGATGA	TCATATCGAT	GTAACCAATC	CAATGAAGGA	TTTGGCTAAG	3780
GGTTACATGT	ATGGATTGTG	TTCTACAGAT	AAGCTTGCTG	CTGGTGT'TTG	GAGTAACTCT	3840
CAAAACAGCT	ATGGTGGTGG	TTCGAATGAC	TGGACTCGTT	TGACAGCTTA	TAAAGAAACA	3900
GTCGGAAATG	CCAACTATGT	AGGAATCCAC	AGCTCTGAAT	GGCAATGGGA	AAAAGCTTAT	3960
AAGGGCATTG	TTTTCCCAGA	ATACACGAAG	GAACTTCCAA	GTGCTAAGGT	TGTTATCACT	4020
GAAGATGCCA	ATGCAGACAA	GAACGTTGAT	TGGCAAGATG	GTGCCATTGC	TTATCGTAGC	4080
ATTATGAACA	ATCCTCAAGG	TTGGGAAAAA	GTTAAGGATA	TCACAGCTTA	CCGTATCGCG	4140
ATGAAC'TTG	GTTCTCAAGC	ACAAAACCCA	TTCTTATGA	CCTTGGATGG	TATCAAGAAA	4200
ATCAATCTCC	ATACAGATGG	TCTTGGGCAA	GGTGTCTCCT	TTAAAGGATA	TGGTAGCGAA	4260
GGCCATGACT	CTGGTCACTT	GAACATGCT	GATATTGGTA	AGCGTATCGG	TGGTGTGCGA	4320
GACTTCAAGA	CCCTAATTGA	GAAGGCTAAG	AAATATGGAG	CTCATCTAGG	TATCCACGTT	4380
AACGCTTCAG	AAACTTATCC	TGAGTCTAAA	TACTTCAATG	AAAAAAT'TCT	CCGTAAGAAT	4440
CCAGATGGAA	GCTATAGCTA	TGGTTGGAAC	TGGCTAGATC	AAGGTATCAA	CATTGATGCT	4500
GCCTATGACC	TAGCTCATGG	TCGTTTGCCA	CGTTGGGAAG	ATTTGAAGAA	AAAAC'TTGGT	4560
GACGGTCTCG	ACTTTATCTA	TGTGGACGTT	TGGGGTAATG	GTCAATCAGG	TGATAACGGT	4620
GCCTGGGCTA	CCCACGTTCT	TGCTAAAGAA	ATTAACAAAC	AAGGCTGGCG	CTTTGCGATC	4680
GAGTGGGGCC	ATGGTGGTGA	GTACGACTCT	ACCTTCCATC	ACTGGGCAGC	TGACTTGACC	4740
TACGGTGGCT	ACACCAATAA	AGGTATCAAC	AGTGCCATCA	CCCGCTTTAT	CCGTAACCAC	4800
CAAAAAGATG	CTTGGGTAGG	GGACTACAGA	AGTTATGGTG	GTGCAGCCAA	CTATCCACTG	4860
CTAGGTGGCT	ACAGCATGAA	AGACTTTGAA	GGCTGGCAGG	GAAGAAGTGA	CTACAATGGC	4920
TATGTAACCA	ACTTATTTGC	CCATGACGTC	ATGACTAAGT	ACTTCCAACA	CTTCACTGTA	4980
AGTAAATGGG	AAAATGGTAC	ACCGGTGACT	ATGACCGATA	ACGGTAGCAC	CTATAAATGG	5040
ACTCCAGAAA	TGCGAGTGGA	ATTGGTAGAT	GCTGACAATA	ATAAAGTAGT	TGTAAC'TCGT	5100
AAGTCAAATG	ATGTCAATAG	TCCACAATAT	CGCGAACGTA	CAGTAACGCT	CAACGGACGT	5160
GTCATCCAAG	ATGGTTCAGC	TTACTTGACT	CCTTGGA'ACT	GGGATGCAAA	TGGTAAGAAA	5220
CTTCTACTG	ATAAGGAAAA	GATGTACTAC	TTCAATACGC	AGGCCGGTGC	AACAAC'TTGG	5280

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ACCCTTCCAA	GCGATTGGGC	AAAGAGCAAG	GTTTACCTTT	ACAAGCTAAC	TGACCAAGGT	5340
AAGACAGAAG	AGCAAGAACT	AACTGTAAAA	GATGGTAAAA	TTACCCTAGA	TCTTCTAGCA	5400
AATCAACCAT	ACGTTCTCTA	TCGTTTCGAAA	CAAACATAATC	CTGAAATGTC	ATGGAGTGAA	5460
GGCATGCACA	TCTATGACCA	AGGATTTAAT	AGCGGTACCT	TGAAACATTG	GACCATTTC	5520
GGCGATGCTT	CTAAGGCAGA	AATTGTCAAG	TCTCAAGGGG	CAAACGATAT	GCTTCGTATT	5580
CAAGGAAACA	AAGAAAAAGT	TAGTCTCACT	CAGAAATTAA	CTGGCTTGAA	ACCAAATACC	5640
AAGTATGCCG	TTTATGTTGG	TGTAGATAAC	CGTAGTAATG	CCAAGGCAAG	TATCACTGTG	5700
AATACTGGTG	AAAAAGAAGT	GACTACTTAT	ACCAATAAGT	CTCTCGCGCT	CAACTATGTT	5760
AAGGCCTACG	CCCACAATAC	ACGTCGTGAC	AATGCTACAG	TTGACGATAC	AAGTTACTTC	5820
CAAAACATGT	ACGCCTTCTT	TACAACTGGA	GCGGACGTCT	CAAATGTTAC	TCTGACATTG	5880
AGTCGTGAAG	CTGGTGATCA	AGCAACTTAC	TTTGATGAAA	TTCGTACCTT	TGAAAACAAT	5940
TCAAGCATGT	ACGGAGACAA	GCATGATACA	GGTAAAGGCA	CCTTCAAGCA	AGACTTTGAA	6000
AATGTTGCTC	AGGGTATCTT	CCCATTTGTA	GTGGGTGGTG	TCGAAGGTGT	TGAAGATAAC	6060
CGCACTCACT	TGTCTGAAAA	ACACAATCCA	TATACACAAC	GTGGTTGGAA	TGGTAAGAAA	6120
GTCGATGATG	TTATCGAAGG	AAATTGGTCA	CTCAAGACAA	ATGGACTAGT	GAGCCGTCGT	6180
AACTTGTTT	ACCAAACCAT	CCCACAAAAC	TTCCGTTTGT	AAGCAGGTAA	GACCTACCGT	6240
GTAACCTTTG	AATACGAAGC	AGGATCAGAC	AATACCTATG	CTTTTGTAGT	CGGTAAGGGA	6300
GAATTCAGT	CAGGTCGTCG	TGGTACTCAA	GCAAGCAACT	TGGAAATGCA	TGAATTGCCA	6360
AATACTTGGA	CAGATTCTAA	GAAAGCCAAG	AAGGCAACCT	TCCTTGTGAC	AGGTGCAGAA	6420
ACAGGCGATA	CTTGGGTAGG	TATCTACTCA	ACTGGAAATG	CAAGTAATAC	TCGTGGTGAT	6480
TCTGGTGGA	ATGCCAACTT	CCGTGGTTAT	AACGACTTCA	TGATGGATAA	TCTTCAAATC	6540
GAAGAAATTA	CCCTAACAGG	TAAGATGTTG	ACAGAAAATG	CTCTGAAGAA	CTACTTGCCA	6600
ACGGTTGCCA	TGACTAACTA	CACCAAAGAG	TCTATGGATG	CTTTGAAAGA	GGCGGTCTTT	6660
AACCTCAGTC	AGGCCGATGA	TGATATCAGT	GTGGAAGAAG	CGCGTGCAGA	GATTGCCAAG	6720
ATTGAAGCTT	TGAAGAATGC	TTTGGTTCAG	AAGAAGACGG	CTTTGGTAGC	AGATGACTTT	6780
GCAAGTCTTA	CAGCTCCTGC	TCAGGCTCAA	GAAGGTCTTG	CAAATGCCTT	TGATGGCAAT	6840
GTGTCTAGTC	TATGGCATAC	ATCTTGGAAT	GGTGGAGATG	TAGGCAAGCC	TGCAACTATG	6900
GTCTTGAAAG	AACCAACTGA	AATCACAGGA	CTTCGTATG	TTCCGCGTGG	ATCAGGTTCA	6960
AATGGTAACT	TGCGAGATGT	GAAACTTGTT	GTGACAGATG	AGTCTGGCAA	GGAGCATACC	7020

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TTTACTGCAA CTGATTGGCC AAATAACAAC AAACCAAAAG ATATTGACTT TGGTAAGACA	7080
ATCAAGGCTA AGAAAATTGT CCTTACTGGT ACCAAGACAT ACGGAGATGG TGGAGATAAA	7140
TACCAATCTG CAGCGGAAC TATCTTTACT CGTCCACAGG TAGCAGAAAC ACCTCTTGAC	7200
TTGTCAGGCT ATGAAGCAGC TTTGGTTAAG GCTCAGAAAT TAACAGACAA AGACAATCAA	7260
GAGGAAGTAG CTAGCGTTCA GGCAAGCATG AAATATGCGA CGGATAACCA TCTCTTGACG	7320
GAAAGAATGG TGGAATACTT TGCAGATTAT CTCAACCAAT TAAAAGATTC TGCTACGAAA	7380
CCAGATGCTC CAACTGTAGA GAAACCTGAG TTTAAACTTA GATCTTTAGC TTCCGAGCAA	7440
GGTAAGACGC CAGATTATAA GCAAGAAATA GCTAGACCAG AAACACCTGA ACAAATCTTG	7500
CCAGCAACAG GTGAGAGTCA ATCTGACACA GCCCTCATCC TAGCAAGTGT TAGTCTAGCC	7560
CTATCTGCTC TCTTTGTAGT AAAAACGAAG AAAGACTAGT ATTTAGTAAA ACCTCTTAAC	7620
AAGATTACGG AAGCAGTCTC TATCTTTTCC AATGAGGTTT ATAGTACAGA AAAAGCCTGA	7680
GAAGATGTCT TCTCAGGCTT TTGTTAAGCA CATAAATACA ATAGTGCTAT GACAAAATCA	7740
CCCAGAAAAA TCTGGGTGAT AAATGTTATG GTTGTGCTGG TTGAGGATTC TGATTTTGTT	7800
GATCAGGGGT TGTATTTGAT TGTTGCGTAT TATTGTTAGG ATTGGTAGTC GTACTATTAT	7860
TTGTGCTTGG AGTGGTTGAG CTAGACTGTG AAGTTGAACT ATCTGATGAT GAGCTTGAAC	7920
TTTCAGTTGA TGGGGGTTGT TGTGGAGCAG GTGAGTTCCA CGTAGAACGA GCACCATTTT	7980
TAAATACGAA TTCTCCATTT CTGTAGAGCC CCTCTGGTAT ATTCCAATCT TCTGGATTGC	8040
TTCTTCAGA CAGGTAGGTC ATCATAGAGC GGTAACTTTT GGCAGCGACC GTAAGGCCAT	8100
TGCCACAAAG TGGTGTGAGA CGGTAGAAT AGCCTGTCCA TACAGCCATT GAATATTTAC	8160
GCGTATAGCC AGCAAATAGT TCATCAGGTG CTACAAATTG AGAGGTCTTG ATGTGGTTTT	8220
CAATTTCTC GTCTGTATAG TTAGAGGTTT CTGTTTTACC AGCCTGAGGG AGCCAAGCAA	8280
GATAGGCATT TCGTCCAGTT CCATAAGTCA AGACTGTTTT CATCATGTCG GTCATCATAT	8340
AGGCTGTCGT TTCCTTCATG GCACGAGTTC CGACATTAGA GAACTCTTTT TCACTCCCAT	8400
CACTAAAGAC GACTTTATGG ATATACATTG GTTTATAGTA AGTTCCACCA TTTGCAAAGG	8460
CAGCGTAAGC AGCAGCCATC TTTTCACTAC TTGCTCCATA TTTTTTGTCT GATTCGGTTG	8520
TGTTACTTGA AATGGCATT T GAGTAGTAA TACTTGGGTA GTCGATTCCT AGACCATTTA	8580
GGAAAGTCTT GGC GCGGTTG AGTCCGACCT TGTTTAGAGT TTCCACGGCT GGGACGTTTC	8640
GCGATTGTTG CAGGGCGTAT TGCAAGGTGA TGTGCCCCA GTAGCCCCA TCCCAGTTAT	8700
AAACAGGAGT ATTTGTCCCA GGGTAGTTAT AGGGCTCATC GTGAACGATA GTAGCAGTTG	8760
AATCGTAGAC ACCGTACTCC AAGGCAGGAG CATAGTCTGT GATCGGTTTC ATAGTTGATC	8820



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CCCAGTCGCG	GTTTGTCTCT	ACTGCTTGGT	TAATTCGGAA	GGAAACATTA	CTTGACTGAT	8880
GGCGTGCTCC	TAGCTGGGCA	ATGACTTTAC	CGTTAGAAAC	ATCAACAATG	GTAAGCGA	8940
CTTGCAATTC	ATCGTCTGGA	TAGGCAACGT	ATTCTCTGT	ATTGTAAATA	TCCCACAGAT	9000
GTTTTTGAGC	TTCTTGGTCT	ACATTTGTGT	AGACATCCAT	CCCAGTTGTG	AGTAGGTTAT	9060
AGCCTGTTTC	TTCTTCAACT	TGATTGATGA	CTTCCTTGAG	GTAATTATCC	ATGTAAGCAG	9120
GGTAATTACT	TGCTGATTG	AGACTTTGTA	GTCCATCAGT	AATTGGTGTA	TTGACTGCTT	9180
TCTCATACTG	TTCAGCAGAG	ATGTAGCCTT	GATTTTTCAT	TTCAGATAAG	ACCAAGTTTC	9240
GGCGGTCTTG	GGCTGCTTCT	GGATGTGAAT	AGGGGTCATA	TTGGTTTGGT	GCCTGAGGCA	9300
TTCCAGCCAG	CAAGGCTAAC	TGAGGTAAAC	TTAAATTAT	GAGGTCTTTA	CCATAGTAGT	9360
TTTGAGCTGC	TGTCTGCATT	CCATAGTTCC	CATTAGACAT	GTAGACCTTA	TTTATATAGT	9420
AGGTCAAGAT	TTCTTGCTTG	GTTGCTTTTT	GTTCTAACTG	AATCGCTAAC	CAAGCTTCCT	9480
GAGCCTTACG	AGAAATAGTC	TGGTCGGAAG	TCGAAGTTGA	AAAGTAAGTC	AACTTAATCA	9540
ACTGTTGGGT	GAGAGTTGAT	CCACCTTGGA	GGGAATTGCT	TTGCAGATTG	CGCAAGAAAG	9600
CTCCCAGGAT	ACGGATGGTA	TCAATCCCCC	TGTGGTCGAA	GAAGCGATGG	TCTTCGATAG	9660
AAACGATTGC	CCTAACCAAA	TCTGTGGGAA	TATCATTAGC	TTGGGCATTG	ACGCGGCGTT	9720
CAGAACCCAA	GTCAGCAATG	AGTTGATTTT	TATGTGCGTA	GATTTTACTA	GAAGTTGTTG	9780
CAACTAGTTT	ACTCTCGGAT	AGGCTAGGAG	CCTTGCTAAC	GACTAGAGAA	AAAACCTCCTC	9840
CGCCTAAGAC	AATGGCTGCG	ATAACCAAGC	TTAAGAAGCT	AATGCTCAGA	TACTTGATTA	9900
GGCGCAGAA	CGTTGGTTTG	TTTCTTGT	TTTACCACCT	AATAAATGTT	CTTTGATAAC	9960
ATTGAGATAA	GGAATTTGAG	GGAAGGCACC	AGCCTTGATT	TCATATCCAT	ATTCTCGAAT	10020
ATATTCAAGT	GGCATTGATT	TTTGTCCCTT	ATCTTGATGA	TAGAAGCGAA	TCAAATCGAA	10080
TGCCGGCAAT	AAGTAGGTTT	CTTGCTGAGA	AGAAAAGTGA	AGAAGGACAA	AGCAGATTCC	10140
TTGTTGGGCA	AGGACTTGTT	CCATATGCTG	AATCTGATGT	GGATGAAAAT	TTTTCATCGG	10200
AATCGCACGT	TTTTGTTTTG	TTTCCTTGAC	TTCAAAGTCG	ATGTAATATC	CATTATAAAC	10260
GCCAGAATAG	TCCGTCGTTG	AAGCTTGTCG	AAAATAGGCT	TCAACAATCT	TGGCACGACT	10320
TCGTTGTGGA	TAGTCCACTT	GTACGATTG	AATAGGAGTT	GGTTTCTTAT	GTATAACAGC	10380
CAAGCCCTGA	GACAAATAGT	AGTCGTTGGT	AGCATTGATC	ATCTTTTCAA	AGGGTACCGA	10440
GCTCGAATTC	GTAATCATGT	CATAGCTGTT	TCCTGTGTGA	AATTGTTATC	CGCTCACAAT	10500
TCCACACAAC	ATACGAGCCG	GAAGCATAAA	GTGTAAAGCC	TGGGGTGCCT	AATGAGTGAG	10560

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CTAACTCACA TTAATTGCGT TGCGCTCACT GCCCGCTTTC CAGTCGGGAA ACCTGTCGTG	10620
CCAGCTGCAT TAATGAATCG GCCAACGCGC GGGGAGAGGC GGTTCGCGTA TTGGGCGCTC	10680
TTCCGCTTCC TCGCTCACTG ACTCGCTGCG C	10711

(2) INFORMATION FOR SEQ ID NO: 146:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 11887 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 146:

TACATTCATT CCATCGGCTA CTCCATAATA CTTAGATAAA ACCATAGCTG AAGTCGAATA	60
CGGATACTGT AAAGTATTAT CAATTTTAAT CAAATCATCA TTACCGATAA TACTTCTGAT	120
TGCTTTTGGT AGTATGAACC ATACGTTGGT GAAATCTCAG ATAATGAAGA ATCATTAGAC	180
TCTGGACCTT TTTCTAGTGT CTCACTTACC TCATATTCTT CACCCTTACT AGAAATAACA	240
CTCAAAGCAG ATACTGTCGA TAACTGGCTA GCCAATAAAG TACTCGCAAT AATTGAAATA	300
CCCAATTTTT TATAAACAGT TTTCTTCATT ATTGTATCCT CCTAATGTAA TTATAGCGTA	360
CTATTTCTAAA TTTCTTAATC TACTATAGAA TCAAGAAATC TACCACCTTC TTAAATACC	420
CTCCATTATC ACATAAACAG GTAAACTTTT CAATTAATGA CTGCGCTTTT CAATCAGCT	480
AGAGTACTT GCTTGCTTCT TTGATACTAA GTTCAGCCAT TCTTTCCTTG TTTTCTCAA	540
TAAAGCATGT TACCCAAGTG GGATTCGTTT TGGAGTAGTC TCGCAGAGTC CAGCCAATGG	600
CTTTATTGAT AAAAAATCTT GTTTGGTTCA AGTTATGAAG GAGAATCTTT TCCATTAATT	660
GAGTATTGGT CTTCTCTTTT CTTAACAAC TGGTGTC AAT AGCGACACGT CTCAGCCAGA	720
TATTATCTGA TAGGCTCCAT TTTTACTCA ATGAAAATCA AAGAGCAAAC TAGGAAGCTA	780
GCCGAGTTG CTCAAAACAC TGTTTGGAGG TTGCAGATAG AGCTGACGTG GTTTGAAGAG	840
ATTTTCGAAG AGTATTAAGA TTATTCTTTC TAGTTCAGGG TGTTCATACA CCAAACCTCC	900
TACTACTCGA TCTAGGATAT CTACCGTGTC CCACAAGGAT TTTGTCACGA CTAACGCTC	960
TAGCTTAGGC AAATCGGTTT CCTTTAGATA AGACTGCATT GCTTTC AAT AGTTAGCAGC	1020
CACATATTGG TATTTTCTAG GATCCTTTTC CCAGCAAGTG TCTGCAAAAT CCCAATCGAT	1080
AATCTTTGTT TTTTTCGCTT CTGGAAAATA TTTTATAGAG TTTATTCTTT TCAGGCACCG	1140
CAATACCTAG AAAAGAAAAT TGATGGCGCA TATAGGCTTC CATGGACCTT GCTTTT TTAG	1200
AGTCTTTTGC TGCTTCTAGC TCCTCAAGTA AATCTGCTAA ACTCATCTAA AACTCCTCTT	1260

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GCCCCACCAA	ATGGTGCTGA	AAGGCATAGA	CAGCCGCCTG	GGTACGATCG	CTGACTTCAA	1320
GTTTGGAAG	AATATTGGAC	ACGTGGGTCT	TGACCGTCTT	GAGAGAGATA	AAGAGGTCAT	1380
CTGCGATGCG	CTGATTTTCG	TAGCCCTTGG	CGATGAGTTG	GAGAACATCT	CGCTCACGCG	1440
CAGTCAATTC	TTCATGAAGT	TCCATATGAT	TGCGGTGGTA	TTCAACCTTC	TTGCTAACCT	1500
CTTGCTCAAT	GGCCAGCTCG	CCAGCAGCTA	CCTTACTGAC	GGCATGAAGC	AATTCATCTG	1560
CACTAGAAGT	CTTGAGCATA	TAGCCTTTGG	CACCAGCATC	TAAGACTGGC	ATGATTTTTT	1620
CATTGTCCAA	ATAAGAGGTC	ACAATCAAAA	TCTTGCTTTC	AGGCCATTCT	TTAAGGATTG	1680
CTAAGGTCG	GTCAATCCCA	TTCATCTCAG	GCATGACAAT	ATCCATGACA	ATGACATCTG	1740
GACGCAGTTC	CAAGGCCAAG	TCAATCCCTT	GAGACCCGTT	GGACGCCTCA	CCCACAACTT	1800
CTACATCGTC	TTGGAGGTCA	AAGTAGCTTT	TCAAGCCCAA	TCGGACCATT	TCATGGTCAT	1860
CTACTAGTAA	AATTTTCATC	TTTACTCCTT	TATCATTCCT	TATCTAACAG	GGGAATACGG	1920
ATATCAACCG	CCAGCCCTTG	CTTGGGAGCT	GTCAAGAGTT	GAAGTGTTC	AGCCATATCT	1980
TCAACCCGCT	CCTTGATATT	TCGCAGTCCA	TAATCAAGT	CGTCTAAGCT	CCCTAACTGG	2040
AAACCAATCC	CATTGTCCAC	CACCTTCAGT	TGCAATTCAA	CATCTGTCTG	ATAGAGGTAG	2100
ACATCTAGGC	AAGATGCCTG	GGCATGGCGG	AGGGTATTGC	TAATCAACTC	TTGCAGGATA	2160
CGGAAGATAT	GCTCCTCGAT	TTTCTTAGGC	AATTTCGTCA	TATTCTGCTT	GAGACTAACC	2220
CTAAGATCAC	TCTTGTCCTC	AAGCTCTTTT	AAAAGAATTT	GAATCCCTTC	TATCAAGCTC	2280
TTCTGCTCCA	GTTCAACTGG	TCGCAAATGC	AAGAGCAAAA	CCCGCAAATC	CTTCTGGGCT	2340
GTTTCTAAAA	TAGCTGTGAC	ACTCTGCAAC	TGGGTCTGCA	TCTTTTCTCT	ATCCAATTTT	2400
AAAGCCTGCT	GAATGATACC	CGATAAAATC	ATGTGGGCCG	CAAACAACCT	CTGACTGACT	2460
GTATCGTGCA	AATCCCGAGC	AATTCGCTTC	CGTTCCTTCT	CGATGATTTT	CTCTTCCTGA	2520
GCAAGGCTCT	GATTTTCAGC	TTTTTGAAGA	GCCTCTGTCA	AAAGGTTAAG	TTTACCTGAT	2580
AAGGACTTGA	AACTGGCATC	CAAATCTGGA	TCTGCAACCT	GAACCACTTC	TTGCCCTGCT	2640
AATAAACGCT	TGAGATTAGC	CTGCATTTTT	CTTAGAGAAA	GCTCTTCGAT	CCCTCGCCAA	2700
AACAGGGCTA	AGAGACAGGT	CATGGACATG	CTGAAAACCA	ACAATAAAAA	GACAAATTTT	2760
TCTGTTTTTT	CGACATCGTG	CAAAAAGATA	GACCAGTCAA	AATCAAGTAT	TTCCAGCAAG	2820
CTGTGGGAGA	AAAAAAGAC	AAATAGGAAG	GAGGTGAGAG	CAATAATGAC	ATAGGCTTGT	2880
TTTTTCATCC	TCTAACCAAC	TCCACATCAC	CAATCATAGT	GGTCAAGAAA	ATCTTGACAC	2940
TCTTGTTACT	CTTGAGATAG	TCTTTTGTTT	CTTGATGATA	GTGTTTATTG	CGGAGGGCTC	3000

980

GCTTGGGCTG GTTGAAAAA ATCAAATCCC CATAGAGACA GTTAACGCTG AGACTGACTT	3060
CCACATCTAC AGGTACGATG ATTTTGGTCG TTCCTACCAT CTTTCTGAGG ATAATGACAT	3120
TGTCATGATT GGTAAAGATG ACCCTCTCCA GATGAATAGT GTCCTTGCCC ATGAAGCGAA	3180
AGAGATTGAT ATCATCGAAT TGGCAAGTCT GGTAGCTTGA AAAATGATGA AGATTTCCTAA	3240
ACCAACGATT TTTCTCCTTC TTAACCGTCA CGACCTCTTC AAAAACCATA TTGGTCTGCT	3300
CTTTTCCTG GTTCATCATC GGGTAAAGAA GAAAGAGGCT ATAGATAACC GCAACAAAAA	3360
TAGCTAGAAT CACAAAAGGA TTGAGCATAA CGATGAAAAA GAAGAGAATG GTTGCCGCTA	3420
CTAAAAGAAG ATTATTTCCT TCTTTACCAG TGTTAGTAGCG AATCAAAAGC AAAAAGAGGA	3480
ATAGTATCAG CAGAAAACGC GAAAAATGCT CTGATACCAT CAAAATCAGA GCTCCTGTCA	3540
GAAGACAGGC TTCGATAAAT AAAAAGATTT TAAATTTTCT CATAGGTTC TCTCTCCCT	3600
TCTATTTTAT CACAATTCAA AAAAGTCACC TCAGTCTGAG GATGGAAAAA AGGCGCTGGT	3660
TACGCCCTTT TCATCTGATC CTTTGCTTCT TTTAATTTTC CATAAAGAAG ATAGTCTACT	3720
TTTTGTAGAT CTGCTATGGT GGCACAGTTA AGGGAACACA TAATCAAGCG TAGATCTGCT	3780
TTCCAGCCTT GGACAATGCC AATCACTTCT TCAACTGTGT AGGTTTCAAC CAATTCAGCA	3840
ACGGTTCGTG ACAATCCAC AGCCTTAGCA CCAAAAACCA AGCACTTAAT CATATCCAGC	3900
GGATTCGGAA CCCCTCCACT AACCAAGAGT TCGACCTTAT CTTTCCATTC TTGGGCATTG	3960
AGAAGGGCCT GCATGGTAGA CTGACCCCAT TGATTGAGGT AATCACGCTG GCCACTACGA	4020
CGGTTTTTCGA TATAGGCAAA GCTGGTGCCA CCACGACCCG ATAGGTCCAC TGTACGAACA	4080
CCGAATTCAT AGGCTCTTTC GATTGTCTTG GCATCCATTC CAAAGCCAC TTCTTGAGG	4140
ACAATAGGAA CGGGAATTTG CTTGCTATAA TCTGCTAGAT GCGATTGCCA GCTTCTAAAC	4200
TTCTTTCTC CCTCGGCAT GAGTAATTCC TGCATGACAT TGACATGCAC TTGCAATAGA	4260
ACAGGATTC TCTCTTCTAC AGTCTGAAGT CCTAATCGA CAGGCTTGTC CAATCCAATA	4320
TTGGTTCCAA GGAGGAGATT GGGATGACTA GACTTGACAG AAAAAGAATC ATCCGTGGA	4380
TTTTTGAGGG CTGCGCTATA AGAACCCGTT ACAAATAAAA TACCACAGGA TTCCGCCACC	4440
TGAGCCAGCT TTTGATTGAT TTCTCTTCCC TTATTACTTC CACCAGTCAT GGCATTGATA	4500
TAAAAAGGAA AGTCCCACTT TCGACCAGCA AACTCTGTCT AAAGATCGAT TTCATCCAGA	4560
TTGTAAAGAG GCAAGGAAGA ATGAATCAGC TCCACCTCAT CAAAGCTATT ATAGGAACCT	4620
TTCTGCTCAA GGGCATAGAG GATATGCTCG TCCTTACGAT TTGTCGTCAT GTCCTATCCT	4680
TTCTTGATAT AAGAGCTCAA TCCCAGATC GGCCCAACGA TTTTAAAGG TTTTGGTTGA	4740
TTGCGCATCA AAATCAGGG CGATGCCACA GTCACCACCA CCAGCACCAC TACTCTTGGC	4800

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AACGGTCTGC	AAATCTTGAC	TGGCTTCTTT	CAACTGTCTA	AGCAAAGGCG	TGTAAATATC	4860
TGTACTCAAG	CCTTCTAAAA	GCTTGCTGGC	TACTTCTACT	TGATCGATAA	TCTTTTCTGA	4920
TTTCCCTGT	TCCAAGGCTT	CTACCAGAGA	AGTCACCGTT	TCTTTTGAGG	AAGTTAAAAA	4980
ATTTTGATTG	ATATTTTGCT	TGATTTGCTG	GACCATGTGA	CTCGATACAG	CCACTTCCTT	5040
GGTCCATCCC	ACTAAGAAAT	CACATTCTAA	AGTTGGTTTC	ACTTGTGAAA	TTGAAAAGCC	5100
CCAATCACGC	TCCAGAACTG	TCGCCAAGTT	TTCTTCTTCT	AACCAAGCAG	CCACCTTCTG	5160
GCGATCAAAT	GACTGGTAGA	GAACCAAATC	CTCTGCCACA	ATACAGGCAA	GGTCGCCCAT	5220
GGAACCATTG	TCTCCTCGCT	TAAGCAAGAC	AGCGCTAGTC	AGCTTGAACA	AGAGCTCCTG	5280
ATCAACAGAA	ACATCATACA	GAGCCAGTAA	AGCCTTGACA	ACCAAGACAA	CGACGCTGCC	5340
ACTAGAACCT	AGACCAAAT	TTTTCCCTTC	TCGTTCCATT	TTGCCACAGA	TTTCTAGAGA	5400
AAAAGGTCTT	AAATTCTGAC	CACGAACAGC	GAGGAAGTCT	CCCATCAAAG	CAATCGTTTC	5460
TTGAATCAAG	CTATAGTCAG	GATTAGGCCT	TAAGTCCACT	GCGAAATCAA	ACATATCTGA	5520
ATAGATACGG	TAGCTGTCAG	AAAAAGCAAT	CTCAGCCCTC	ATATAGATGG	GAATATCCTT	5580
TATCAAAGCT	AACTGCCCTG	GCTCTAAAAT	AGCATATTCA	CCTGCCCAAT	AGAGTTTTC	5640
GCAAGTTTTA	ACAGCAATCA	TCTTGACTCA	AATCCTTTGT	TTTTGACACA	ATCAAGCGAT	5700
AACGATGACC	GAAAATTTCT	GATAAATGCT	CCAAGTCTTT	CTCCTGACAG	AAGACCTTAA	5760
CATTGGGACC	AGCATCCATG	GTAAAGTAGC	AGGCCTCTCC	TTTCTCACGA	AGCTGGCGAA	5820
CAAAGGCCAT	AGCCTCATAA	GAGGCATCCG	TCAGATAAGA	AAAGGCTGGA	CTAGCAGTCT	5880
TTGTTCGTAGC	ATGCATAGCC	AGGGCATTTT	TCTCCGTAA	TTCTCCAATC	TTGGCAAAAT	5940
CATTTTCCTT	GAGATAAATC	AGCATATCCT	GATAGTCCTT	CTCAGACTGA	CGAACCCAGT	6000
CGTCGAAAGT	CGTCGAGGTT	TCCACACAAA	GTTTCATCCC	GTCACGGCTA	GAGATTGGTT	6060
TTTTCTTGTC	CTCTAGCACC	AACATAATCA	TAGCTAGTTT	CAAGTCTGTC	TCTACAGGGT	6120
AAATTCTCTC	ACTATCCTTA	TCCCAGGCTC	CTAGTGGTCC	ATAAAAACTC	CGAGAAGAAG	6180
AACCTGAGGC	AAATTGGGCT	TCCTGTGCCA	ACTGACTTCT	ATCCAATCCA	AGCTTGAAAT	6240
AAGCATTACA	AGCCTTGACC	AGGGCGGACA	AACCACTAGA	ACTTGAGGAC	AGACCCGCTG	6300
CCGTAGGCAT	ATTGTTTGA	GTATCGATAC	GGACAAAGCC	CTCACCAGCT	GGACGATAAC	6360
GGTCAATAAT	CTTACTCATC	TTGGCATGCT	CGACCTCAT	TTGTAGCTGA	CCATTGATGT	6420
AAAATTCGTC	AGCTGTTACA	TTGGCTGGTA	AAGGCGACAA	GGTCGTCTCT	GTATACATAT	6480
TTTCCAAAGT	TAGAGAAATA	CTGCTAGTAG	CAGGCACCAT	CTCTTTTCT	TTTTTCTTTC	6540

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CCCAATATTT GATAATAGCA ATATTTGCGT AGGAACGTAC TGTACAGGC TCTCTATCCA	6600
TGTCTGAACA GCTCCTTTCT CTTCTAATCT TTCTGCTAGT TCTTGTGCGT GTGTCAAATT	6660
GGTTACCAAG GCTATGATAC AACCTCCTAG CCCACCACCG CTCATCTTGG CACCCAGAGC	6720
ACCATGGCTA AGAGTCGTTT CAACCAAAAA GTCTGCCTCA GGGCTACTGA CTCCAATTTT	6780
TTTTAAATGT AAATGCGCTT GACTGAGGAT TTGTCCCAGT CCTTCAGCAT CTTTTTGTGA	6840
AATCGCAACT TCTGCTTGCT GGGTTAATTC TCCCAAGGCA TGCAAAAACG GTAGGGCATC	6900
CTTGCCCTTA TTTTGAACCA CTTGGATGGC TTCACGAGTA TGACCATAAA CACCCGTATC	6960
GGCAATCACC AAATAGGCGG ATAAATCCAT CTCAAGTTCT GTAAATCCTA CGTTCCTGAT	7020
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GGCAATCATT TCAGCTCGAT TGACCAAGAT TTCTAGTACA TCATGAGGCA GATCAGCCTG	7140
ATAGTAGTCA AATACTGCAC GAATGGCCGC TATGCTGATA GCCGCTGACG AACCCATCCC	7200
CCGTTTCTCA GGGATAGCCG AGTCAATCTC ACAACGAATG CAGGCTTCTG TGATATTCAA	7260
ATACTCCAGT GAGGCATAAA CCGCCATGGA CAAGGTATCC TCCTCATAAA GCGCCAAGG	7320
ACTCTCTGCA GGAACCTACCT TACAGGTCAC CTCACCTCC AAAAGAGGCA GGGAAATGGC	7380
AGGATAACCG TAAACGACCG CATGTTCCCC TATTAAAAAT ATCTTACTAT GTGCCTGACC	7440
GACACCAACT TTTTTGTCA TTTTTCTCTT TTAGTAGACG AAAAAACGTC TTTATTTTCA	7500
TACAAGTATT AATTCTTTCC TATCTATTTT ATTATATTTT CACAAAAAAA GCGATTGTTT	7560
CCATTACAAA TCGCTTCTTT CATTATTGAA CCCATTGCGC ATTATAGTTG ACAGAATAGC	7620
CATCTACGGT CGTATTCCT GCCAAGGCAC CTGAGCGCTA TAAGCGTAGT ACCATCTGCC	7680
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AAGAGGAAAG TCGTGAGGGA GCATGCGCCA TTGACAACCT GTTTTAGTGA CGTACAAAGT	7800
CTCATTAACA AGTACTCGTT TCGGCCATTT ATAGGTGCGG TGTTTGAGA AATAGGGTTC	7860
AATCTTCGCC CATTCTTGAT CGTTTAAATC AGTATCATAT GCTTTGCGTA TCATAACTCT	7920
AGCTTAACAT TTTTTGTGA ATACAGGTTC TAAATAATCG ACCACGAAAA TTTCTTAAGT	7980
GGAAAACGCC TTATGAAGTA TGCTACGGGA AAGTTATGCA CTTAATTTGA CAATTCAAGA	8040
TGTAAAAATA TATACTATAG TAGATTGAAA CTAGAATAGT ACACCTCTAC TTCTAAAATA	8100
TTGTTAGAAA TCGATTTGAC TGTCTGATC GATTTATCCT GTTATTATCT CATTTTACTA	8160
TAATATTTGA TAAGTTATCC TAAAAGTATT ATTATGTTGT TGTGTATAG ATTGATTGAA	8220
TCTAACTAAA GGATCCTATT CAATTACTAG AACTATCACA TACTCAAGGT CAGCTCACAG	8280
ATGAGCAACT ATTTTGTTA CAATGTCTAC TAAATTTAAG TCAAACAAAT AATTTAGTCA	8340

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AAATTAAAAA	AATAGAGGAA	CATAAATATG	ATTACAAAAC	AGAATGTAAT	AGTGTCTCTAC	8400
AATTTTTTACT	AGATAAAACT	GTAAATTCTG	AAGGAAGGAT	CACTTCTTCA	ACAGAATTTG	8460
GAAATTTTCGT	AAGTAATTTA	TCATTCCAAC	ACGGAATAGC	TGGACTACTG	TTTCCTCTAA	8520
ATAAATTGTA	CCCCCAGAA	CTGGATTCTA	AAATACTCTC	TATCATCAAG	AAGGCAGTGA	8580
CAATTAGAAC	GACACACACA	TATGAATATC	AATACTCACT	GCTATTTGGT	GATGCAGGCT	8640
ATCTATGGTT	ACTCCTACAT	TTATTTTCTA	TCAGTAAAAA	TCAATACTAT	CTACAATTAG	8700
CAAACGTCAC	CGCTAAAAAA	TTAATAGAGA	ATTATGATAC	TCTAGAGGAA	ATAGACTTTG	8760
CATTGGGAAA	ATCTGGTGTC	CTATTATCAT	TAATAAAATA	CTATCAATTT	ACCAATGACA	8820
ATACTCTTAA	AATTTTCATC	CACAATAGTA	TAGGGGAAAT	TTATCATTAT	TTCTTACAAA	8880
GAGATACAGC	CAAAGAAAGC	ATTTTAGACT	ATAGCTTTGC	TCATGGATAT	TGTGGAATTG	8940
CATATGCTTT	ATTTGCCAT	TCTAAAGTCT	TAGAACCTTC	TATGTTTTAT	AATGATCTCC	9000
ATACATTCCA	TACTGAATTA	AAAAAATAT	TAGAAAAAGT	TACTTCTAAT	ACTGAAAATT	9060
TAGGAAATTT	ACAACTTTCT	TGGTGCAAAG	GAATTTCCGG	AATAATCTTA	TATCTTTGTA	9120
TGTACGATTG	TGACGGAAAC	AAAGATATTA	TTAGTAAATA	TCAAGAATTT	GTTTTTAACC	9180
ATCATCTAAA	AATGATGACA	GGATATTGCC	ACGGAATAAC	TAGCTTACTA	CAAACCACTG	9240
TCTACAATCA	AAACAAATTA	CTGATGAAAA	AAATCCAACA	GGTAATTTTA	GCATGTTCTG	9300
AACGAGATGA	TCACGGTTTA	CTGATGTTTC	AAGGAGATAG	TGGTAAAGCA	GATTTGTTTG	9360
ACTTCGGAAT	AGGAAGCATG	GGGTATATTG	GTGTCATTAT	AATAATAAAT	TCCCATTCTGA	9420
TGTGCAGACA	TAAGGAGAAA	AGTATGAAAT	TATTTTGGAC	AAACAACATA	TATAGACAGT	9480
TGCTGCTAAA	CAGCTGTTTT	TCATCATTCG	GCGACAGTAT	TTTCTACCTC	GCCATTATCA	9540
ATTATGTGGC	TCAGTACAAT	TTGCTCCGC	TAGCGATTTT	ACTGATTTCC	ATTTTCAGAGA	9600
TGGTTCCCCCT	ACTATCGCAA	CTCTTTCTCG	GGATTCTAGG	AGATTTTCAA	GAAAAATAGAG	9660
TCAAACACGC	ACTCTGGATT	GCCAAAATCA	AAATCCTGCT	CTACGCTATT	TTGACAGTAT	9720
TTCTCGTCTT	GTCGCCCTTT	TCATTAGTTT	CAGTCATTAT	GATTGTCATC	ATCAACCTCA	9780
TCTCTGACAC	CTTGAGCTAC	CTGTCTGCCT	ACATGATGAA	CGCCCTCTAC	ATCAGTGTA	9840
TTAAGGACGA	CCTGCATGAT	GCCATGGGGT	TCAGGCAGTC	TCTGATGAGG	GTTGTCCGTA	9900
TTGTGCGCAA	TCTGGCTGGC	GCATTCCTTA	TCAATGTTAT	AAGTATTCAA	ACTATTTCCC	9960
TTATCAACAC	TCTGACTTTT	GTCATTGCCT	TTTTGGGCCT	GTATGTTATT	CGACATACCT	10020
TGTATGAGGT	TGAAAAAAGA	ATTGAAATGT	CACATACAGC	ACTGAGTTTT	AAGAAATATT	10080

984

TTCAACATCT	TAAACAGTCG	CTGGCTGTGC	TCCTGAGGTT	AAAAGATACC	GTCATACTAC	10140
TGTTTCTGAC	GACCAGTATG	ATTGCCATCT	TGGATGTGTC	CCCTCGGCTG	ATTGCCCTCC	10200
GCTTCATCCA	ACAGACACTA	GCACAACCTGA	GCATTGGGCA	ACTCCTCGCC	CTGCTCTCCA	10260
TCATCATGTC	TTGTGGAGCT	ATCCTTGGCA	ATATGACCAG	CAGTAATCTA	TTTAAAAATA	10320
TCCGTTTCAC	GCACCTCTTG	GTTTTCTGTG	AGATTTCCTT	ATTGACTCTA	ATAACTAGTA	10380
TCCTTTGTCA	AGCCTATATC	GTAATTTTCA	TGACCAGTTT	CATCAGTTCT	ACGATTATCG	10440
GCATTCTCAG	CCCTCGCCTA	CAAGCAGCTG	TCTTTGCCCA	TATCCCCAGT	GACAAGATGG	10500
GGACGGTGGG	CTCTGCTCTG	AGCACAGTGG	ACATTCTCGC	CCCGTCCCTG	CTCTCCCTAT	10560
TAGCCCTATC	CATAGCATCG	GGCGTTTCGG	TGCAGTTAGC	ATTGATATTT	TTGTATCTTA	10620
TTTTAATGTC	TCTTATCTTT	TGTCAATGGT	TAGTCAAGTT	CAACACTCAT	AACTAACGAA	10680
AAAGCATGTG	TAGATTTCAC	ATGCTTTTAA	TCTCCCCAAT	CGTCAGGTCA	AGTACAACAA	10740
AGTCACTTCT	TTGATTAAGC	GAGTGTCTTA	ATATAATTAT	AAGCGCCCTG	TCATTACCGA	10800
ACCCATTTCG	CATTATAGTT	GACAGAATAG	CCATCTACGG	TCGTATTTCAC	TGCCAAAGCA	10860
CCTGAGCTAT	AAGCATAGTA	CCAGTTGCCA	TTGACCTGGA	ACCAACCTGT	CTTCATGTCT	10920
CCATTACCTG	CATTTAGGTA	GTACCAAGTT	GAACCATCTT	GATACCAACC	AGTTGCCATA	10980
GCTCCTGATG	AACGGAGATA	GTACCATTTG	TTCCCAAGGT	TTTGCCAACC	TGTTTTTCATA	11040
TCGCCATTTG	GGTGGTCTAA	ATAATACCAA	GTGGTACCTT	CCTGATACCA	GCCAGTGGCC	11100
ATTGCTCCTG	AGGAACGGAG	GTAGTACCAC	TTATTACCTA	GATATTGCCA	ACCTGTTTGC	11160
ATAATACCAG	TTGTTGGATC	TAGGTAGTAC	CAAGTCGAAT	CATCGTTTAT	CCACCCCGCA	11220
CGTCTTTCAC	CACCAAGGTA	GTTTTCTCCA	TTAATTTCCT	TCTTAGCTAG	ATAATACCAG	11280
TTAGACTGAT	CATAAAGCCA	ACCTGTCTCT	AAAGAATGAT	TTTGATTAAA	GTAATAGTTC	11340
GTATAATAAC	GCTTCTCTTC	TTTATCTTCT	GAATCTTCAC	GTTTTTCCCC	GTAATTCTCT	11400
CCAACACTGT	CTTTAGTTTT	AATCTCTAAT	GTTTTCCAAC	CAACAAACTC	TTGTAGCACT	11460
CCATTTTAT	CGAAGTAGTA	CCACTCTGAC	TTTGGAAGAA	CTTCTAATCT	GATACCATTT	11520
GGGTAAGGAC	CAATTGTACT	ACCTTTAGAT	GGAAACGGGA	TATATTGCCA	GCCGACAACC	11580
ATCTCTCCAG	ATAGAGAATC	AAAATAATAG	TACTTACCAT	CAATCACTCG	CCAGTAGGTT	11640
TCTTTGAGGT	CCCCCTTTTT	GTAGTAGGTT	CTTCCGTTTT	CTTGACAAA	CTGCCATCCT	11700
TCAGAATCAT	CTGCAAATAC	TGTACTGGTC	CCTAGCAAAC	CAAAGAAAAA	TACTGTCAGT	11760
CCAACCTGCA	TAGTTTTTTT	CAAAATTTTC	ATCTATATAC	CCTCCAATAT	TAAATCCACT	11820
CACCAGATGA	GGCGAAATTA	TAACTTTTAC	CATCGATAGT	TTGGCTACCT	GTAACCATTG	11880



985

CTCCAGG

11887

(2) INFORMATION FOR SEQ ID NO: 147:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 11340 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 147:

CCGGTATGTT CTGGAATACT ACCAATCTAA GCTGGCTGTG CCCTACAGTT TTACAACCCCT	60
GTACGAATAC CTTAAGGAAT ATGACCGATT TTTCAGCTGG GTTTTGGAGT CTGGTATTTTC	120
AAACGCTGAT AAAATATCCG ATATTCCTTT ATCAGTTTTC GAAAATATGT CTAAGAAAGA	180
CATGGAATCC TTTATCCTTT ATCTACGTGA ACGTCCCTTG CTGAATGCTA ATACAACAAA	240
ACAAGGTGTT TCACAGACAA CTATCAATCG AACCTTATCA GCACTTTCTA GTCTTTACAA	300
GTATCTAACC GAGGAGGTG AAAACGATCA GGGGGAACCT TATTTCATC GTAATGTAAT	360
GAAAAAGTT TCCACCAAGA AAAAGAAAGA AACCCTTGCT GCCAGAGCTG AAAATATCAA	420
GCAAAAACCT TTTCTAGGTG ATGAAACAGA AGGTTTCTA ACTTATATCG ATCAAGAGCA	480
CCCACAACAG CTTTCAAATC GAGCTCTCTC ATCATFCAAC AAAAATAAAG AACGAGATTT	540
AGCCATTATT GCCCTTCTCT TGGCATCTGG TGTTGCTTA TCTGAAGCTG TTAATCTAGA	600
TCTAAGAGAT CTCAATCTAA AAATGATGGT TATTGATGTT ACTCGAAAAG GTTGCAAACG	660
TGACTCAGTC AATGTCGCTG CTTTTGCTAA ACCTTATTTA GAGAATTATC TGGCCATTCG	720
GAATCAACGC TATAAAACGG AAAAACAGA TACAGCCCTT TTTTAACTC TCTACAGAGG	780
TGTTCCTAAT CGTATCGATG CTTCTAGCGT TGAGAAAATG GTTGCTAAAT ACTCAGAGGA	840
TTTTAAAGTG CGTGTAACAC CCCATAAACT GCGCCATACA CTAGCAACTA GGCTCTATGA	900
TGCGACTAAA TCACAAGTTT TAGTCAGTCA CCAACTAGGA CATGCTAGCA CACAAGTCAC	960
TGACCTCTAT ACCCATATTG TTAGTGATGA ACAAAGAAT GCTCTGGATA GTTTATGATT	1020
TTACGTATTT TAAATTATGT AAATAAATAT CAAAAAAGA AGTTGGCCAA CTTCTTTTTC	1080
ATTTATCCAA CTACCGCTTC AGCGATTTC TACGGCTAA TACCAGCGAA GTAGCGTGTG	1140
ATATCAATGG TTTTTCAGCG CTTAAGAACA TCTTCGCGTT CGTATTTTAC CCCACGAAGG	1200
ACATCTTCTA CTGCAGCAAC GTCTTCAATA CCAAAGAAGT CACCATAAAT CTTGATGTCT	1260
TGGATTTTTC ATTCAGTAAC GTTAGCAAAG ACTTCAACCT TACCACTAGT GAATTTGATT	1320

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CCACGACGGA	CGTTAAATTC	AGGTGATTTA	CCATAGTTCC	AGTCCCAAGT	TCCAAACTTA
GTATCCTTGA	TGCGATTGAT	TTCGGCCAAT	TCTTCTTCTG	AAAAGACGTA	TTCAGTCATC
TCTGGGTACT	CTTTTTCAT	GTATCCAAG	AGTAAATCAC	GGAATTTTTC	GA CTGTGATT
TTTTTTGGTA	ATTCATTGAT	AATATTGGTT	ACACGGGCAC	GGACGGATTT	CACACCTTTT
GATTCAAATT	TATCTTTTGA	AACCTTAAGG	GCATTTGCGA	GGACTGACAA	ATCAACGTCA
AAGAGCAAGC	AACCGTGGTG	CATGATACGG	CCGTTGATAT	AGGCTTGGGC	ATTGCCACAG
AACCTCTTAC	CATCAATCTC	AAGGTCATTA	CGACCTGTGA	ACTCAGCTTT	AACCCCAAGT
TGAGCCAGGG	TATTGATAAC	CGGAGTTGAG	AAGCTCTTGA	AGTCAAATGC	CTTATTTTCA
TCTTCTTTGG	AGATGATCGT	G TAGTTGAGG	TTATTTAAAT	CGTGGTAAAC	AGCTCCACCA
CCACTAATAC	GGCGAACTAC	CTCAATACCA	TTTTCGCGAA	CATAATCACG	GTTGATTTCT
TCGATAGTGT	TCTGGTGACG	ACCAACAATG	ATAGATGGCT	TGTTAATCCA	AAGTAGGAAG
ATTTGATCCT	CATCCAAAAG	GTGTTTAAAG	GCGTATTCTT	CCAAGGCAAT	ATTAAAAGCA
GTGTCATTTG	AATGATTGAT	AATGTATTTT	ATGATATCCC	TTTACTTTAT	ATGATAGAAA
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GCCATTCCTA	GAACATCTGC	AAACGCTTCG	TACATCACTT	CAGAGTAAGT	TGGGTGCCCCG
TGGATGGTCT	TCAGCATTTT	CTCAACAGTG	ATTTCCATTT	CGATGATGCT	TGATGCTTCG
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TTATCAGCGA	TAACTTTTAC	GAAACCTTGA	GCTGCGTCAG	ATGCAATAGC	ACGACCGTTA
GCAGCAAAGT	TAAACTTACC	GATGGCAACA	TCGTATTTCT	CACGGGCTTG	TTCTTCTGTC
AAACCTACTG	CTGCTACTTC	AGGGAGAGTG	TAGATGGCTG	CAGGAGTCAA	ATTCAATTTG
GCAACTGCAT	GATTTCCCTT	AAGGGCATTT	TCAGCGGAAA	CTTCACCCAT	GCGGAAAGCT
GCGTGAGCCA	ACATCTTAGT	ACCGTTGATG	TCACCTGGTG	CATAAATGCC	TGGAAGTGAA
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ATACCTTCAA	GGTCTGGCAT	ACGACCAATT	GAAAGAAGAG	CTTTGCTTGC	GATGATATCG
TCTTTTTCCT	CAACCTTGAT	ACGAAGTTGA	CCATTTTCCT	CAATGATTTT	TTGCAGTTTA
GTACCAGTCA	AGATGGTCAT	TCCTTTACGC	TCAAGAATCA	AGCGAAGGTT	CTTAGAAACT
TCCACATCCA	TAGCTGGAAC	TATACGGTCC	ATCATTTTCG	TAACAGTCAC	TTTGAACCA
AATGTCATGA	AGGCCTGACC	GAGTTCGATA	CCGACAACCT	CACCACCGAT	GATAACAAGG
CTTTCTGGCA	CTTCGTTTCT	TTCAAGAATG	TCATCACTAG	TCATGACAAG	TGGAGATTCC
ATACCAGGGA	CGTTGATCTT	GTTGACTTTT	GAACCACCAG	CAAGAATGAT	TTTCTTGGTT

987

TCAAGCAATT CAGAACCATT TACCAAGACG TTCTTGCTCT TAGTGATTGT ACCAATTCCT	3180
TTATGAACAG TAACTCCGTA GCTACGAAGA AGTCCTGCAA CACCACCAAC AAGAGTATTA	3240
ACAACCTTAG ATTTAGTTTC TAAAAGTTTT TCCATATCAA CAGTGAAGTT AGGATTTTCA	3300
ATCACGATAC CACGATTGTC AGCATGACCG ATATTTTCAA TAATTTTCAGC GTTATGAAGG	3360
TAGGTCTTGG TTGGAATACA TCCACGGTTT AAGCAGGTTT CACCAAGTTC AGATTTCTCA	3420
ACAAGGGCAA CCTTACCGCC GAATTGGGCA GCTTTAATGG CTGCAACATA ACCAGCAGGA	3480
CCTCCACCAA TCACAACGAT ATCAAAAGCA TCATCGCTCT TACCATCATC GTTTGAGGTA	3540
CTTGCTACAG GTACAGGGCT AGCTTCTGGC GATGCTGCTC CAGCTGTTGG GATGTTTTCC	3600
CTTCTTTCAC CAAGGTAACC GATAACTTCC GTTACAGGGA CAGTTTCACC ATCTCCTTTG	3660
AGAATGGCAA TCAAGTACCC ATCTTCTTCG GCTTCCAATT CCATGCTGAC TTTATCAGTC	3720
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ACGATTTGTC CTTCTGTCAT ATCCACGCCG GCTTTTGGCA TAATTACTTC TAAGGCCATG	3840
TCTTCCTTCC TTTATCTATA TCTTAAAAAT GAATACTCTT GCTCTTAAAT TAACATTGAG	3900
ATTGGCGTTT CAATCAACTC TTTCAAGTCC TTCATAAACT TAGCACCAGC CATACCATCT	3960
ACGACACGGT GGTCAATGGT TAATCCTAAA CTCATGATTG GGCGAATCAC AATTTACCA	4020
TTGACGACAA CTGGCTTCTC GATTGTGCAA CTGACACCAA GGATAGCTGA GTTGGGTGG	4080
TTAATAATCG GACCAAAGGA CTGAACACCA AACATTCCTA AATTACTGAT TGTGAATGTT	4140
GAATTTTGTA ACTCACTTGG AGCCAATTTA CCATCCAAGG TACGGCCAAT AACATCCTTA	4200
AAGGCTACAA CCAGTTCTGA AAGACTCATC TTCTCAGCAT TGTAAACAAC AGGTGTCATC	4260
AATCCATTAT CCATCCCAAC TGCCATGGCA AGATTGACAT AGTTGTGAGT GATAATAGTC	4320
TTGCCATCTT CTGTCAATGA AGCGTTGATG TATGGGTGTT TCATAAGAGT CTTAACAACCT	4380
GCAAGCGAAA GAAGTCTGT TACAGTAGTC TTCTTCCCAG TTGCTTCCAT GATTGGCTCA	4440
AGAACCTTCT TACGAAGAGC CAACATTTCA GTCATATCAA CTTTATAGTT GAGGGTGAAG	4500
GTTGGCGCAG TCAAGTAAGA TTCAACCATG CGTTGGGCAA TAACCTTACG CATTGGTGTC	4560
ATTGGAATAC GCTCGATTTT ACCATATGGT GTTACGTTAT CAGGGACTTC TTCCACTTTT	4620
TCAATCTGAG CAGGAGATTT GATGCTATCG TTTTCGATAT TTTCAGGAAG CAGGGCCAAA	4680
ACATCCTTCT TCATGATTTT ACCACGATGA CCGGTTCTTT GGATTTCTTG CCAAGCAATG	4740
TTATGTTTCA GGGCAATTCG TTTTGCAAGT GGCGAAATGC GAACCACGTT TGTGCTTTTA	4800
TAAGTTTCCA CGTCTTCTTT GTGGACACGA CCGTTTGAC CTGAGCCAGA AACGTCGTAG	4860

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AGGTTTATCC CTAAATCATC CGCTAACTTT CTAGCTGCAG GAGTCGCTCT TAGCTTGTC	4920
TCAGCCATGA CCTCTCCAAT TCTATTTATG ATACAAAGGG CGTCAAAAGC GACTGAAAAA	4980
TAGGAAATCG ACGATGGCTT CGATGAAGCC AAGGAGATTT ATCTTTTTC CGATCTTTTA	5040
CCCCGTGCTC TAATCTAAGA TATTAATGAC GAAGAGCTCT GCACCTAAAA GATACAAAGT	5100
TTCTCGTCAG CTTTATTTTA TTTACATAAC TTATCTTATG TAACCCTATT CTTTGTATA	5160
AGTTTTTCGG ATTGCATCTT TGATACTTTC AACTGTTGGA ATCATGTCAT TTTCTAGGTT	5220
TTGTGCATAA GGCATCGGCA CATCTTCTCC TGCACAACGG CGAATTGGTG CATCTAGATA	5280
GTCAAATGCT TCTGATTCTG AAATAATAGC TGAAATTTC CCGATATAGC CACTTGTTTT	5340
GTGGGCATCG TTGACCAGAA CAACCTTACC AGTCTTCTTC ACTGAGTTTA TGATGATATC	5400
CTTATCAAGC GGAACAAGGG TACGTGGGTC AACAAATTTC ACTGAAATTC CTTCTTCTGC	5460
TAATTCTTCA GCAGCTTGAA CCACACGGCG AAGCATTTTT CCATAAGTAA CAACTGTTAC	5520
ATCCGTTTCT TGGCGTTTGA TTTCACCAAC CCCAAGTGGA ATTGTGTAGT CTGGATCAAC	5580
TGGCACTTCC CCTTTTTGGT TAAATCTGA CTGTACTCA AGTATAATAA CTGGGTGTT	5640
ATCACGGATA GAAGACTTAA GCAGGCCTT CATGTCCGCA GGTGTTCCAG GTGCCACAAC	5700
CTTAAGTCCT GGAATGTGAG TAAACCAAGA CTCTAGAGAT TGTGAGTGCT GGGCGGCAGA	5760
GCCAACTCCG TTACCAGCTG CACAACGAAC AGTCATTGGA ACCTGACCTT TACCACCAA	5820
CATGTAACGT GTTTTAGCAG CTTGGTTGAC GATATTGTCC ATGGCAATAA CAGAGAAGTC	5880
CATGAAGGTC ATATCGACGA TTGGACGAAG TCCTGTCATG GCTGCTCCTG CTGCTGCTCC	5940
AGAGATGGCA GCTTCAGAAA TCGACAGTC ACGGACACGT TCTGGACCAA ATTCTTCAAG	6000
CATTCCAACA GAAGTACCGA AGTCTCCTCC GAAGACACCG ACGTCTTCTC CCATCAAGAA	6060
CACATTTTCA TCGCGACGCA TTTCCTCAGA CATAGCAAGG ATAATGGTGT CACGGAAGGA	6120
CATTGTTTTT GTTTCCATTT TATCTCTTTC TCCTTAGTCT GCGTAAATAT CTTCAAAGGC	6180
TGATTCAAGC GGTGGGAATG GGCTTTCCTC TGCAAATTTA ACAGAAGCTT CTACTGCTTC	6240
CTTTACTTGC GCTTGGATTT CTTCCAATTC TTCGGCACTT GCAATGTTAT TTTCAATAAG	6300
GTAATTGCGG AGGTTTTCGA TTGGATCTTT TTGTTTCCAC AATTCCTT CTTACGCGT	6360
ACGATATTTA CCAGGGTCAG ATGATGAGTG ACCGAGCCAG CGATAAGTTA CACTTTCAAT	6420
CAAGACTGGA CCATTGCCAC TGCGAACATG GTCCACAGCT TTCTGAAATC CTTCATAGAC	6480
ATCGATGACA TTGTTACCGT CTTGATGAA CATTCCAGGA ATTCCATAAG CGGCGCTACG	6540
TTGATGGATA TGTTCTATAT TGGTCATTTT CTTGATATCC GCAGAGATAC CGTAACCGTT	6600
GTTAATGCAA TAGAAAATGA CTGGCAGGTT CCAGATAGAA GCCATGTTCA CTGCTTCGTG	6660

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GAAAACACCT TCATTGGTCG CACCATCTCC AAAGAAGCAG ACAACGATT TACCGGTATT	6720
TTGCATTTGC TGA CTGACCGGAG AGCGATCCCC ATACCACCAC CTACGATACC	6780
ATTGGCACCA AGGTTCCCAG CATCAAGGTC AGCGATATGC ATAGATCCAC CTTTCCCTTT	6840
ACAGGTTCCA GTGTATTTAC CAAGGATTTC AGCCATCAT CCGTTGAGGT CAATCCCTTT	6900
AGCAATAGCT TGCCCGTGTC CACGGTGGTT TGAGGTAATC AGATCATCTG GATTGAGAGC	6960
TAACATAGCC CCCACGTTAG CTGCCTCTTC ACCAACAGAA AAGTGCGTCA TTCCTGGCAC	7020
TTTCCCTTTC TTTACTAATT GTGCAATTTT TAAGTCCATG CGACGGATT TTTCCATCTT	7080
ACGGAACATT TCTAGCAAAA GATTTTTATC TAAAGTTGAC ATCTTCTTGC CTTTCTAAT	7140
TTCTTCTTAC CTTACTATTT TACCGCTTTT GGCAAATACT GTCAAAGTTT TTCTAAAAGA	7200
AATTTACAAA AATAAAAAAG AAAACCCCGT GAAAACAAGG GATTTTCTTG TCAAGAATAT	7260
TTTTTCACAA ACTTTTTAGC ATTTGGATT TGTAAAGAT TCAAATCTCT TCATAATCAC	7320
AGTTAAACGC CAACGGTAGA GCGCCCGCT CACAATCAAA CTAATAATCA AGCCGATCCA	7380
GTAAGAATAA GCTCCAAAAT CTGTTAGGGA ATCAAATAGC GTAAACACAGG GATTGCTACG	7440
CCCCAATAAC CAAGCAAACC AAGGTAAAAA GGAATAACTG TATCCTTATA CCCCCGAAA	7500
ATTCCCTGAA GCGGCGCCGC AAAGGTATCT GCTAACTGGA AGAAAAGACT ATAAGTTAAA	7560
AAACGCACTG TCAAATCGAT AAATTTTGGG TCGTTACCAT AAAGACTGGC CACATTTCCC	7620
CTAAAAATGT AAAGGAAGGT TAAGGTGAAG GCCGCAAAAA TGAGGGCAGT CCATCTTCTT	7680
AGACCAATAT AGGTTTTTCG ATCATCAAAT CGCTTGGCTC CCACTTCATA GGAAACGACA	7740
ATAGCCATAG CCGATGAGAT ACTCATAGGA AAGGCGTACA TAAGACTTGA AAAGTTCATA	7800
GCTGACTGGT GACTAGCTAT AATCAAGGGC GAAAACCTTAG CCATAATCAA GCCAACCATT	7860
GAAAAGATAG CCACTTCCGC GAAGACAGTT CCCCCAATAG GCAGACCTAA ACGAACTCCT	7920
TCCTTAATTT TATCCATATT AAGTGGAATT CGTTTCTCAA GGTGTAAGGC TTTGAGCTTC	7980
TCCTGTTTAA ATAAAACCAG AACAGAAATC CCAAGCAAGA CCCAGTAGGC CAAGGATGTT	8040
CCTAAACCAG CACCAGCCCC TCCCAGTTCT GGAACACCAA AGGCACCGTA AATCAAGAGA	8100
TAGTTAAATC CGCTATTGAG AGGGAGTAAC AAAAGCATGA GTTACATGGA CAGTTTGGTC	8160
AAGCCCAGCG AATCCAGCAA GGAACGAATG ACGCTAAAGA GCAACAAGGG GATAATCCCG	8220
ATAGATAAAA ACCAAAGATA GCGAACCGCT ACTGCCGCTA CTGCTGCTTC TAACCCAATA	8280
TGATTCAAGA TTATTGGTGC CAAGAAAAGT ACCATCCCCA GCAAGACCAC AGATAGGCCC	8340
AAGGCCAAAT AAATAAATG GTAAAAATCA GACGCAACTT CTTCTTTTTT GCCTCGACCA	8400

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AGATGGTGAC	CAATGATAGG	CACCAAGGCT	GACACAATCC	CTGTTAGAAA	TGTAAAGAAA	8460
GGATTCCAGA	TACTGGTTGC	CATAGATACA	CCAGCCAAGT	CCATAGTGT	GTATTGACCT	8520
GTCATTGCAG	TATCAACAAA	AGAGGCAGAA	TAATTGGCAA	ATTGGTAGAT	CAGGATTGGG	8580
AAGAAAATTT	TTAAAAATA	TACTAACTTC	TCTCGTAAAC	ACTTTGTCTT	ATACATACTT	8640
CTCTTTCTAT	TCTGATTTAT	CTAAACCAA	GAGTTTCAGA	CCATAGTTTT	TCAAACCTAG	8700
CGGAGGTTTA	TTAGATTTTG	AAGTAGTATG	CCAACACGCA	CATGTACGAC	AATAATAGCT	8760
TCTAACTAAA	CCTCCGTAT	CATATTGAAC	CGCATGGTCA	GCTTTTTCTT	TAGTTTCATA	8820
TTGAATTTTG	GAACGATTAG	CTGCGGGACA	GTAAATTCCA	CTATTAGATT	TCGCTTGTCT	8880
CTCCCTACGT	TTTCGAAAAT	AATTCATATT	CTAACTCCTA	TCAAGCTTGA	TAGACGATTT	8940
GTCCCTTACA	GATGGTATAT	TTAACCTGCC	CTTTTAAGGT	TTCAACCGATG	AATGGTGAAT	9000
TAGCTGCTTT	GGAAGCAAAA	TGGGAGTCCA	CAAAGCGGTC	AGCCTTGGCA	TCAAAAATAG	9060
TGATATCTGC	TGGACCATTC	TCAGCCAAGT	AACCTGCTTC	AAAGTTGTAA	AGCTTGGCTG	9120
GGTTGTATGT	CATTTTTTCA	AGTAATTCCA	TCAAGCTCAA	CTCACCAGCT	TCTACTAAAT	9180
AGGTCAAGCT	GAGAGACAGG	GATGTTTCTA	AGCCAGTCAT	ACCAGATGGC	GCTTTGGTAA	9240
TATCCTCAAC	ATTTTTTTCA	TCTACATGAT	GAGGCGCGTG	GTCAGTCGCA	ATAACTGTGA	9300
TGACACCTGA	TTTGAGACCT	TCGATAACGG	CACGACGGTC	TGATTCCAAA	CGAAGCGGTG	9360
GATTCATCTT	AGCATTTGCTA	CCTTGTGTTA	AAAGAAGTGC	TTCTGTCTTA	GAGAAATGCT	9420
GTGGCGCTAC	TTCTGCTGTG	ACTTCTGCAC	CTAACCCCTG	AGCAAACCTC	ACTACTTTAA	9480
CACTTTCTTC	CTTAGACAAA	TGCTGGATGT	GAACATGGGC	TTTAGTTGCA	TAGGCAATCA	9540
TGACATCAGC	CGCCATCATA	GCGTACTCAG	CCACCCAGT	AGCACCGCAG	ATATGGAAAT	9600
GTTCTCTAGC	AATATTTTCA	TTAAAGCCAA	GAACACCGTT	CAAACCTGGA	TCTTCCTCAT	9660
GAAGGCTGAT	AAAGGTATTG	AGTTTTTTGG	CTTCCTCCAT	GGCTTCCTTG	ACAATCTTAC	9720
TGCTCTCAAG	CGGAATACCG	TCATCAGAGA	AACCAACCGC	ACCAGCTTCT	AAGAGTGCTT	9780
TAAAGTCAGT	CAAGTTTTTA	CCATTAAAGT	TTTGTAGTAAT	GGTCGCAACT	GTCTTGACAT	9840
TAATCTTCTC	TTTGGCAGCT	GACTGGAGAA	CTGCTTGCAA	AGTCTCCACG	TCTGAAATGG	9900
TTGGACTGGT	ATTAGCCATC	ATGACGACAG	TAGTAAACC	ACCTGCAGCG	GCTGCTAGGG	9960
CACCAGTATG	AATGTCTTCT	TTATGTGTTT	GACCAGGTTC	ACGGAAATGA	ACATGAATAT	10020
CGACCAAGCC	AGGAGCAACC	ACAAGACCAG	TAGCATCAAT	CGTTTCTGCT	CCTTCTTCCG	10080
TGATCTCAGA	CGCAATTTTG	ATAATTTTCC	CATCTTGAAC	TAAGACATCA	CAAACCTGAT	10140
CCAAACCAGA	CTTGGGATCC	ATTACACGAC	CATTTTTGAT	TAGTAGCATC	TGCTTTCTCC	10200

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TTTATTCATA GAAATCAACT TGGGTATCCA ACAATTTATC CCCATCATAA ACAAACCTGG	10260
CTGAAAAGAA GGGTTTATCC TCTAAAAGCC ACTCAACAAA GGTGTGGTCA CCTTCCCAAG	10320
TCGGCTTGCT CAAAACCTCA TCATAGGGAA CCCATTCTAG CGTCCCCTCA TTGCAGTCAA	10380
TCAAGTCGCC CTCAACTCC GTCACCTTAA AAACATAGGT GTACCAGTCT AAATCTGGTG	10440
TAAATTCAGG AAAAGTGATG ACACCTTTTA GAACTGGCTT GGCTTTGAGC CCTGTTTCTT	10500
CAAGGATTTT ACGCGCCGCG CATTCCTGGG GCGTCTCTCC TCTCTCTAGC TTACCACCCA	10560
CACCAATCCA TTTCCCTTCA TGGACATCAT TGGGTTTCTT ATTACGATGG AGCATGAGCA	10620
GTTCTTTCCC ATTATCAATG TAGCAAATCG TCGCTAACTG AGGCATATTT TCTCCTTATC	10680
TAAGCCAATC GATTGGCTCT TGTCCGTCTT CTTTTAAGAA TGCATTGGCC TTGGAAAAGG	10740
GCTTGGAACC CCAAAATCCT CTATAAACCG ACAAAGGACT TGGATGGGCT GATTGATAA	10800
TCAAGTGATG AGGATTGGTA ACTAATGCCT TCTTCTTACG TGCATAAGCT CCCAGAGTA	10860
CAAAAACGAC TGGTCTATCT AGATGATTGA CCACCTGAAT CACAGCATCA GTAAAAGGCT	10920
CCCAGATTG ACCAGCATGA CCATTGGCCT GTCCAGCAGG AACAGTCAA CAAGCATTA	10980
GAAGCAAGAC TCCTTGCTCA GCCCAAGCTG TCAAATCATG AGATTTCTTA ACTCCGATAT	11040
CATCTGACAA TTCTTTCAAG ATATTTTGCA AGGATGGTGG AGCTGGGATA GAGTCAGGTA	11100
CAGAAAAACT CAAGCCCTGC GCTTGACCTG GTCCGTGATA GGGGTCTTGC CCTAGAATTA	11160
CCACCTTAAC TTCTTCAAGC AGTGTGTCA AGAGAGCCTG AAAAACCTTT TCCTTGGGTG	11220
GATAAATAAT CCCCTGAGAA TAGACCTGCT CCATAAAGT ATTGATTTTC CCGAAATAAC	11280
CCTCAGGTAA TTGCGCCTTA ATCAAAGCAT GCCAAGACGA GTGTTCCATA GCCGACTCGG	11340

(2) INFORMATION FOR SEQ ID NO: 148:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 12127 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 148:

AAAAAATAGA CTTGTTAGAC TATAAATGTA GTAAGCCTAC ACAAGAAAAA TACATAGAGA	60
TAAAGGTGAT TATTATGAAA TTCAAAAAAA TGCTTACTCT TGCAGCCATT GGCTTATCAG	120
GATTTGGGCT TGTGCTGT GGCAATCAGT CAGCTGCTTC CAAACAGTCA GCTTCAGGAA	180
CGATTGAGGT GATTTACGA GAAAATGGCT CTGGGACACG GGGTGCCTTC ACAGAAATCA	240

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CAGGGATTCT	CAAAAAGAC	GGTGATAAAA	AAATTGACAA	CACTGCCAAA	ACAGCTGTGA 300
TTCAAAATAG	TACAGAAGGT	GTTCTCTCAG	CAGTTCAAGG	GAATGCTAAT	GCTATCGGCT 360
ACATCTCCTT	GGGATCTTTA	ACGAAATCTG	TCAAGGCTTT	AGAGATTGAT	GGTGTCAAGG 420
CTAGTCGAGA	CACAGTTTTA	GATGGTGAAT	ACCTCTTCA	ACGTCCCTTC	AACATTGTTT 480
GGTCTTCTAA	TCTTTCCAAG	CTAGGTCAAG	ATTTTATCAG	CTTTATCCAC	TCCAAACAAG 540
GTCAACAAGT	GGTCACAGAT	AATAAATTTA	TTGAAGCTAA	AACCGAAACC	ACGGAATATA 600
CAAGCCAACA	CTTATCAGGC	AAGTTGTCTG	TTGTAGGTTC	CAC TTCAGTA	TCTTCTTTAA 660
TGGA AAAATT	AGCAGAAGCT	TATAAAAAAG	AAAATCCAGA	AGTTACGATT	GATATTACCT 720
CTAATGGGTC	TTCAGCAGGT	ATTACCGCTG	TTAAGGAGAA	AACCGCTGAT	ATTGGTATGG 780
TTTCTAGGGA	ATTAAC TCCT	GAAGAAGGTA	AGAGTCTCAC	CCATGATGCT	ATTGCTTTAG 840
ACGGTATTGC	TGTTGTGGTC	AATAATGACA	ATAAGGCAAG	CCAAGTCAGT	ATGGCTGAAC 900
TTGCAGACGT	TTTTAGTGGC	AAATTAACCA	CCTGGGACAA	GATTAAATAA	AATGTTTGCT 960
CCATAAATCT	CTAAAGAGAT	GCAGACGTTT	CATCGTACAA	TAAGATAAAG	AAGGCAAGTA 1020
GGGAGGTGTC	GTATCTCCCT	TACTTTCTTC	ACTAGAAAGG	ACAAGATGTG	ACAAAACAAG 1080
CCTTCAAAGA	AGCAGTTTTT	AGGGCAATTT	TTTTCATGAG	TGCAACAGTA	GCTGTTGTAG 1140
CTATTTTGCT	AATCTGT TTC	TTTATTTTTA	GTAATGGCTT	ACCTTTCATA	GCTAACTACG 1200
GCTTTGCCCC	TTTTTTATTA	GGCAGTGATT	GGTCGCCAAC	GAACATTCCG	GCAAGCTATG 1260
GTATTTTACC	AATGATCGTT	GGTTCCTTAT	TAATTACCTT	AGGAGCGATT	GTGATTGGGG 1320
TGCCAACAGG	CATCTTGACA	TCGGTGTTTA	TGGTTTATTA	TTGTCCAAAG	CCCGTCTATG 1380
GCTTCTTAAA	ATCAGCTATC	AACTTGATGG	CAGCCATTCC	ATCTATTGTT	TATGGTTTTT 1440
TCGGCCTACA	ATTATTGGTG	CCTTGGATTA	GAAGCTTTTT	AGGAAATGGC	ATGAGTGTCC 1500
TAACCGCTTC	GTTACTATTA	GGAATAATGA	TTTTGCCAAC	CATTATCAGT	TTGTCAGAAT 1560
CTGCTATCCG	AACAGTCCC	AAAACGTATT	ATTCTGGTAG	CTTGGCTCTA	GGAGCTAGTC 1620
ATGAACGGAG	TATTTT TAGT	GTCATCTTGC	CAGCTGCGAG	ATCTGGTATT	TTATCAGCAG 1680
TTATTTTAGG	AATCGGTCGC	GCAGTAGGTG	AAACCATGGC	AGTTATTTTG	GTGGCAGGCA 1740
ACCAGCCGAT	TATTCCAAGT	GGACTCTTTT	CAGGAACCAG	AACCTTAACA	ACCAATATTG 1800
TTCTGGAAAT	GGCTTACGCA	TCAGGTCAGC	ATAGGGAAGC	CCTTATTGCA	ACCTCAGCAG 1860
TTCTCTTTTT	CCTTATCTC	TTGATTAATG	CCTACTTTGC	CTACTTGAAA	GGAAAATCAT 1920
CTTATGAGTA	AATACCTGCT	AAAAC TTCTC	GTTTATTGTT	TTTCAGCTTT	AACCTTTGGC 1980
TCTCTCTTTT	TAATCAT TGG	TTTTATCCTC	ATCAAAGGCT	TACCTCATCT	AAGTCTATCC 2040



CTCTTTTCTT	GGACTTATAC	TTCTGAGAAC	ATTTCCCTTA	TGCCAGCGAT	TATTTCCACC	2100
GTTATTCTGG	TCTTTGGTGC	TCTTCTTTTA	GCCTTGCCCA	TAGGGATTTT	TGCTGGTTTT	2160
TATCTTGTGG	AATATACAAA	AAAAGATTCC	CTTTGTGTTA	AAATCATGCG	ATTGGCCTCA	2220
GATACCTTAT	CTGGGATTCC	TTCCATTGTT	TTTGGTCTGT	TTGGCATGCT	CTTCTTTGTA	2280
GTCTTCTTAG	GTTTTCAATA	CTCTCTGTTA	TCAGGAATCT	TAACCTCAGT	TATCATGGTG	2340
TTGCCAGTCA	TTATTGCTC	AACAGAAGAA	GCCCTTTTAT	CTGTTAGTGA	TAGCATGCGT	2400
CAAGCAAGTT	ATGGACTTGG	GGCAGGTAAG	TTACGGACTG	TTTTGTAGAAT	TGTTCTACCA	2460
GTTGCCATGC	CAGGTATTTT	AGCTGGAGTG	ATACTAGCTA	TTGGCCGTAT	CGTTGGTGAA	2520
ACAGCTGCCC	TCATGTATAC	ATTAGGTACC	TCTACCAATA	CGCCAAGTAG	TCTCATGTCT	2580
TCAGGCCGTT	CTCTAGCCCT	ACATATGTAT	ATGCTGTCAA	GTGAGGGGCT	ACATGTCAAT	2640
GAAGCCTATG	CTACCGGCGT	GATTTTGATT	ATTACTGTTT	TAATGATAAA	TACTCTATCA	2700
AGCTTATTAT	CTCGAAAAC	TGTGAAAGGA	GCTTCCTAGT	ATGGGAACAT	TTTCAGTCAG	2760
ACACCTAGAC	TTATTTTACG	GGGATTTTCA	AGCCTTAAAA	AATATTTTCA	TTCAATTACC	2820
AGAAAGACAG	ATTACTGCCT	TGATAGGCCC	ATCTGGTTGT	GGCAAATCAA	CTTTTCTAAA	2880
AACCCCTAAC	CGGATGAACG	ATTTGGTTCC	TTCTTGCCAT	ATTGAAGGCC	AAGTCCTCTT	2940
AGATGAGCAA	GATATTTATA	GTAGCAAAT	CAACCTTAAT	CAGCTACGTA	AGCGTGTAGG	3000
GATGGTTTTT	CAACAGCCTA	ATCCCTTTGC	CATGTCTATC	TATGATAACG	TGGCTTATGG	3060
CCCAAGGACA	CATGTTATTC	GAGACAAAA	ACAATTAGAT	GCCTTAGTGG	AGAAATCTTT	3120
AAAAGGGGCA	GCCATTTGGG	AAGAAGTCAA	AGATGATCTT	AAAAAGAGTG	CCATGTCCTT	3180
ATCTGGCGGT	CAGCAGCAAC	GCCTTTGCAT	TGCGCGAGCT	TTAGCAGTAG	AACCTGATAT	3240
TCTGTTAATG	GATGAGCCGA	CTTCAGCCTT	AGACCCATATC	TCCACTTTAA	AAATTGAAGA	3300
CCTCATTCAG	CAACTAAAA	AGGATTATAC	GATTATCAT	GTTACCCATA	ACATGCAACA	3360
AGCTTCACGT	ATTTTCAGATA	AAACTGCTTT	TTTCTTAACA	GGAGAAATTT	GCGAATTTGG	3420
AGATACCGTT	GACGTGTTTA	CCAATCCAAA	AGATCAGCGC	ACAGAAGACT	ATATTTTCAGG	3480
ACGGTTCCGA	TAAGGAAGGA	AAAACCTATG	AGAAATCAAT	TTGACTTAGA	ATTGCATGAA	3540
TTAGAACAAT	CCTTTTLAGG	ACTAGGGCAA	CTTGTCCTTG	AAACAGCTTC	AAAAGCCTTA	3600
CTGGCCTTAG	CCTCCAAAGA	CAAGGAGATG	GCAGAGCTAA	TTATCAATAA	GGATCATGCT	3660
ATCAACCAAG	GTCAAAGCGC	TATCGAATTG	ACCTGTGCCC	GTTTGTGGC	CTTGACGACG	3720
CCACAAGTGT	CTGACCTTCG	ATTTGTGATT	AGCATCATGT	CTTCTGTTC	AGACCTTGAA	3780

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CGTATGGGAG	ACCATATGGC	AGGCATTGCC	AAAGCTGTTT	TGCAACTAAA	AGAAAATCAA 3840
CTAGCCCCTG	ACGAAGAACA	GTTACACCAA	ATGGGTAAAT	TATCCCTCAG	CATGCTAGCC 3900
GATTTATTGG	TTGCCTTTCC	TTTGCACCAA	GCCTCAAAAG	CTATTAGTAT	TGCTCAAAAA 3960
GATGAACAGA	TTGACCAATA	TTATTATGCC	TTATCAAAGG	AAATCATTGG	ACTTATGAAA 4020
GACCAAGAAA	CCTCAATTCC	CAATGGAAC	CAATACCTTT	ATATCATAGG	GCATCTGGAA 4080
CGCTCGCTGA	TTACATTGCT	AACATTTGTG	AACGCCTAGT	CTACCTAGAA	ACAGGAGAAC 4140
TAGTGGATTT	GAATTAATTC	AATAATCCT	TAAAAGAGAA	GAGTACGATT	AAGTACTCTT 4200
TTTTATGGTT	GTAAAAAGT	TCATTTGACC	AATTTAAGCA	GTGTAGATAG	TGAGGAGTTG 4260
TTTCAATTCT	ATCGTGAACG	AGGGAATGCT	GAAAACTTTA	TCAAAGAAAG	GAAAGCAGGA 4320
TTCTTTGGGG	ATAAGACAGA	TAGTTCGACC	ATGATTAAGA	ATGAAGTACG	TATGATGATG 4380
GGCTGTCTGG	CTTATAATCT	CTACCTCTTT	TTAAAGCAGC	TAGCTGGTGA	TGAAGTAAAG 4440
TCCTTGACTA	TCAAGCGTTT	TCGACGTCTC	TCCTTCATA	TGCGCGGAAA	ATATGTCTCT 4500
ACTGCTAGAC	GACATATTCT	CAAATCTCTA	AGTCTATACG	CCTATTCAAA	ACAGTTTCAA 4560
GCCTTATTTG	ATACAATCTG	CCAGATAAA	CTGATACTCC	CTGTTCCATA	TAGAGCTAGA 4620
GGGCAGGGGA	AAACATGCCT	AACAGAATAA	GTCACCTTAT	TTTAAAAATC	GAGCATCAAA 4680
CCAAGGGAGG	AGTCTGCCCT	TTTTTAGGAA	AAAATCAAGA	CAAATCTCCT	CAATTATGTC 4740
TCGAACATCA	GAAATTAAGC	AAAATCACCA	GAAGGACAGT	ATTTCAACTA	GCTTTTCTGG 4800
TAATTTTGA	ACTGTGTAGT	TCGTTAGTGC	CAGATATGAA	TAATTTGGGA	TGATAAATCT 4860
TTCTTCCTCA	GGTAGCCTAT	CATAATACTC	TTCAAAAATC	TTATCAAAAA	CACTCTCTTT 4920
CTTTTGGGCG	ATAGTTTCAT	CTTCGTATGT	AGGAGTCCTC	ATCAAGAAAT	ACTTCAATTC 4980
TAGGTATTCC	TTATCCAAC	CTATATAACT	TGGCATCAAC	TTGTAATCTT	CAACCCCCAA 5040
ACGTTTCAGCA	ATATATTTTA	ACTTTGTTAG	TATTGGTCTG	GATTCCTCCAT	TTTCAATTC
AATTAATTGA	CGGATACTTA	ATTCAGACTC	ATCACCACAA	AATTCTGAAC	GAAGTATTCT 5160
TTTAGCCAAA	CGTAATCTTT	TAATTTTTC	GCCAAACTCT	CGCAACCTAC	AAGAACTTCC 5220
TGAGTTGTTT	ACCTCTATTA	TAAGCATATA	CTGAATCAAA	CTATCTATCA	GATTTCTTCT 5280
CACTTTAACT	AAAGACTAAG	AGTTTATCCC	TTCGTCTCGG	TTTTTGTGTA	TTTTTCCACC 5340
ATACCCAGT	AATGCAAGTG	CAAAATCCCC	TAGAATATGA	TAGAATAAGA	GAAAGAACTC 5400
TATCAAGGAG	GAAATCATGG	AAAAACAAAC	CGTCGCCGTC	TTGGGGCCTG	GTTCTTGGGG 5460
AACCGCCCTT	TCACAAGTCT	TAAATGACAA	TGGACACGAG	GTACGTATTT	GGGGAAATCT 5520
TCCCGAGCAA	ATCAATGAAA	TTAATACACA	CCATACTAAT	AAGCACTACT	TTAAAGATGT 5580

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CGTTCTAGAC	GAAAATATCA	TTGCCTACAC	CGACTTAGCA	GAAACATTGA	AAGATGTGGA	5640
TGCGATTTTG	TTTGTTGTCC	CAACAAAAGT	GACACGACTT	GTTGCCCAGC	AAGTTGCACA	5700
AACCTTGGAC	CATAAGGTTA	TCATCATGCA	CGCATCAAAG	GGATTAGAAC	CTGATAGCCA	5760
TAAACGATTA	TCAACCATTC	TTGAAGAAGA	AATTCCTGAA	CATCTCCGTA	GTGATATCGT	5820
CGTTGTTTCA	GGGCCTAGTC	ATGCAGAAGA	GACCATTGTG	CGTGACCTAA	CTTTAATAAC	5880
TGCTGCTTCT	AAAGATTTAC	AAACAGCTCA	ATACGTTTCA	AAGCTATTTA	GTAATCACTA	5940
CTTCCGACTT	TATACCAATA	CGGATGTTAT	CGGGGTTGAA	ACTGCTGGTG	CTCTTAAAAA	6000
TATTATTGCT	GTCGGTGCTG	GAGCTTTACA	TGGTCTTGGA	TTTGGTGATA	ATGCTAAGGC	6060
AGCCATCATC	GCTCGAGGTT	TAGCAGAAAT	CACCCGCCCTA	GGGGTAGCAC	TCGGGGCCAG	6120
TCCATTGACC	TATAGCGGCT	TATCTGGTGT	GGGAGATTTG	ATCGTAACGG	GAACCTCCAT	6180
CCACTCTCGT	AACTGGAGAG	CTGGAGATGC	TCTCGGACGA	GGAGAATCCC	TAGCTGATAT	6240
AGAAGCTAAT	ATGGGCATGG	TAATCGAAGG	AATTTCAACG	ACTCGAGCAG	CCTATGAACT	6300
AGCCCAAGAA	CTTGGAGTCT	ATATGCCCAT	TACACAGGCT	ATTTACCAAG	TTATTTATCA	6360
CGGAACCAAT	ATCAAAGATG	CCATTTATGA	CATCATGAAC	AATGAATTTA	AAGCAGAAAA	6420
TGAGTGGTCT	TAACCCCTCTA	TAGAAAGGAT	TTTTATGACA	TCAAAAGTTA	GAAAGGCAGT	6480
CATCCCTGCT	GCTGGACTAG	GAACCTGATT	TTTACCAGCA	ACCAAGGCC	TTGCCAAAGA	6540
AATGTTGCCA	ATCGTAGACA	AACCAACTAT	CCAGTTTATC	GTGGAAGAAG	CTCTCAAATC	6600
AGGTATTGAA	GATATTCTAG	TTGTCACTGG	TAAATCAAAA	CGTTCTATTG	AGGACCACTT	6660
TGATTCAAAC	TTCGAATTGG	AATATAACCT	CAAAGAAAAA	GGGAAAACAG	ATCTTTTGAA	6720
GCTAGTTGAT	AAAACAACTG	ACATGCGTCT	GCATTTTATC	CGCCAAACTC	ATCCACGCGG	6780
TCTCGGAGAT	GCTGTTTTGC	AAGCCAAGGC	TTTCGTGCGA	AATGAACCTT	TTGTCGTTAT	6840
GCTTGGTGAT	GACTTGATGG	ATATCACAGA	CGAAAAGGCT	GTTCCTACTT	CCAAACAACT	6900
CATGGATGAC	TACGAGCGTA	CCCACGCGTC	TACTATCGCT	GTCATGCCAG	TCCCTCATGA	6960
CGAAGTATCT	GCTTACGGGG	TTATTGCTCC	GCAAGGCGAA	GGAAAAGATG	GTCTTTACAG	7020
TGTTGAAACC	TTTGTGAAA	AACCAGCTCC	AGAGGACGCT	CCTAGCGACC	TTGCTATTAT	7080
CGGACGCTAC	CTCCTCACGC	CTGAAATTTT	TGAGATTCTC	GAAAAGCAAG	CTCCAGGTGC	7140
AGGAAATGAA	ATTCAGCTGA	CAGATGCAAT	CGACACCTC	AATAAACAC	AACGTGTATT	7200
TGCTCGTGAG	TTCAAAGGGG	CTCGTTACGA	TGTCGGAGAC	AAGTTTGGCT	TCATGAAAAC	7260
ATCCATCGAC	TACGCCCTCA	AACACCCACA	AGTCAAAGAT	GATTTGAAGA	ATTACCTCAT	7320

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CCAACCTGGA AAAGAATTGA CTGAGAAGGA ATAACAAAAT CATTTATATA AAGATTAGCC	7380
ACACATAAAT TAAGTAAATT CTCTACTTGA ATCTACCTAT TTAATAAAAA CTAATGAAAA	7440
CGCTATACTT GTATTTGTTT TTTCATTAAA ATAAGAGTAG AATAAATTAG TATAGTAAAA	7500
CAAAAAAGCA CCGAATCGGT GCGCAC'TTT TCAAGTTGTG TACGGACAAA GCCTTATTTT	7560
AACTTTGCTA TGTGTTTCT AATGGTTCCA AAATAATAAA TAATTTTAAA TTGACTTAA	7620
CTGTTGGAGT AGTCATGGTT AAATTAAATC AACCGAGCCG AACATAAGTT GTTTAATTTT	7680
GTGGAAGCTA TTAATAAAAA TATAATAAGG GAGAAAGATA GGTGTAATTT TAATTTTAAA	7740
GTAATTGCGG ACACTATCAA AGAAAAAGAT TATGGAGAAC AAATTGTAG AATTTATCGA	7800
AAACAATAAA AAAGTAATCA TTTCATCAGT TGCAGTTGGT GTTGATTTGG TATTAGGGTT	7860
TGGATGGTAT TCATATAACC AACAACAAGC AGAACAACAA GCAAAAATTG TACAATTAGA	7920
AAAAGATAGC AAATCAGACA AAGAACAAGT TGATAAACTA TTTGAATCAT TTGATGCATC	7980
TTCAGATGAA TCTATTTCTA AATTTAAAGA ACTATCTGAA ACTTCACTTA AAACCGATGC	8040
AGGTAAAGAC TATCTTAATA ACAAAGTCAA AGAATCATCT AAAGCAATTG TAGATTTTCA	8100
TTTGCAAAAA GGT'TTGCTT ATGATGTTAA AGATTCAGAT GACAAATTTA AAGATAAAGC	8160
AACTCTTGAA ACAAATGTAA AAGAAATTAC AAAACAAATT GATTTTATCA AAAAAGTTGA	8220
TGAAACTTTT AAACAAGAGA ATTTGGAAGA AACTCTTAAA TCTCTAAATG ATCTTGTTGA	8280
TAAATATCAA AAACAAATCG AACTTTTGAA GAAAGAAGAA GAAAAGCTG CTGAAAAAGC	8340
TGCTGAAAAA GCAAAGGAAT CTTCTAGTCA AAGTAATTCT TCTGGTAGTG CTTCTAATGA	8400
GTCTTATAAT GGATCTTCCA ATTCAAATGT AGATTATAGT TCATCTGAAC AAATAATGG	8460
ATATTCAAAT AATTATGGCG GTCAAGATTA TTCTGGTTCA GGAGATAGTT CAACAAATGG	8520
TGGATCATCA GAACAATATT CATCTAGCAA TTCAAACAGC GGAGCAAATA ATGTCTACAG	8580
ATATAAAGGC ACTGGTGCTG ACGGCTATCA AAGATACTAC TACAAAGATC ATAATAATGG	8640
AGATGTGTAT GATGACGATG GAAATTACCT TGGGAAC'TTT GGTGGCGGCA TTGCAGAACC	8700
TAGTCAACGC TAATAACTAT TTTAGAGCTG TGTGTTTCG AATGGTTCCA AAACACATTA	8760
AAAGCTACTC ATTTT'TTAAG TAGCTTTTTT CTTATTCAG TTTACATATT ATACTCAATG	8820
AAAATCAAAT TCAAACCACG TCAGCATCGC CTTACCGTAG GTATGGTTAC TGACTTCGTC	8880
AGTTTCATCT ACAACCTCAA AACCATGTTT TGAGCTGACT TCGTCAGTTC TATCTACAAC	8940
CTCAAAGCAG TGCTTTGAGC AACCTGCGGC TAGCTTCCTA GTTTGCTCTT TGATTTTCAT	9000
TGAGTATTAG TCGTCACAAT CCCATCCCT TGTAGAAAAG CAAAATGGCG AGTCCTACGA	9060
ACAAGACTAC CGCTCCTAAT CTCTGGCTGG TGTTATACAT CCGTTTTTCT CCTCTAACTG	9120

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GAAAGATAAC TGCTAGAAAT GCGCCACCAA CTGCACCACC GATATGGCCT GCTAGGCTGA	9180
TTCTTGGAAT CAGAACACTT CCAATAATGT TAACCACAAA AAGTGTGAGA TAGGATTGCC	9240
CTAGCTGTTG GATATAAGGA TTGCGAGTTG CATAGCGAAG AACAATAATC GCGGCAAATA	9300
GCCCATAAAG AGAGGTAGAG GCGCCTGCTG CTAAGGATTT AGGACTAAAT AAAAAACAA	9360
AGAGATTGCC CATCATTCCT GATAAAAGAT AGAGAAAGAA AACTGCTTA GAACCGAAAA	9420
TCTCCTCTAC CTGCCTTCCA AGATAATAAA GTGAAAGCAT ATTAACAATG AAATGTTCCC	9480
ACCCAATATG AACAAAAATG GCAGACAAGA GACGCCAAAC CTGCTCGGGA AAGAGGCGAA	9540
TAGCTGGCCC ATACATGGCT CCAAATCGAA ATAATGTATC TGCCCTGTCA AAGTTTCCGC	9600
CTGCAGTGAC CAACATTAGT AAAAATACCA AGGCCGTCAC TAAGAGGAAG AAACCTCGTCA	9660
CAGGGTAACG TCTATCAAAG ATTTCTTCA TCAATTAATA CCTCCTGAAC AGGAATATCA	9720
TGGTTTTAG GTATAAAGTC CTGAATTTGA CAAGGATATA TCGTACTCAA AGTACGACCA	9780
GAAAAATGTT CCAGATAGCG GTCATAATAG CCTCCACCGT ATCCTATCCG ATATCCTTTC	9840
GTCTGAAAAG CCAGACCAGG AACATGAATC AAATCAATCT GAGATGCATC CACCACTTCC	9900
AAATCTCCCT GTAGCTCCAG TAAGGCAAAG AAAGTTTTTA CCAACTGTTG CGGATCATAG	9960
ACCACAAAGT CCATGCGCCC CTGGGATAA GTTTTGGGTA TTAAAACCTT CTTGCCGTCC	10020
TTTCAGCGCT GCTCAATCAG TTCCTGCGTT TGAAACTCAT GAGAAAAAGA GAGGTAGGTT	10080
GCGATGACCT TGGCTTCTTG ATAAAAGGGG TGTGTAAAA GCCGCTCGGT TAAAGCTTGG	10140
TCTATAGCCT GTTTTGTGTC TTGAGATATA GCCTTCATTT CATGCAAGAC TTGCTTGCCT	10200
AATTCGATT TCATAGACAA GCCCTCTATT CTGCTGCCCT CTTTTTCAGG AACTAGACA	10260
CCGCAGCCAC CCAATAGCT AAGACTTCTT CCTTAGGACT CATTGAGGG TGATGAAGAG	10320
CGTAGGGACT ATCGATACCT AGCCAAAACA TCACGCCATC AACCTTTGAA AGGAGATAAC	10380
CAAAGTCCTC GCCTGTCATA GCAGGTTCGA TATCAATCAA CTCGATTCCG TCTTTTTCGT	10440
CAAAGAAGTC CATCAGTTCA CGCGCCAAGG CTGGATTGTT CTCAACAGGT AGGTATCCAC	10500
CTTGTTTGAG TTCCACTTCG ACTTCCATAT CAAAGGCAGC TGCAACCCCT TCTGCAACTG	10560
TTTTTACCCT CTTTTCACAC AAGAGACTCA TGTCTGTGT CAAGGCACGA ATAGTTCCAT	10620
GTAAAAAAGC TGTGTCTGTG ATGACATTGT TGGTGGTTCC AGCTTGAAAA ACGCCGAAGG	10680
TCACCACTGC TCCCTCGATT GGGTTGACAT TGCGGCTAAC AACTGACTGC ACTTGGGTCA	10740
CAAAGTAACT AGCCGCCACC AAGGCGTCAT TGGCTTCATG AGGAAAAGCT GCGTGCCAC	10800
CTTTCCTTT GAAACGGATC TTCACCTCGC AAGTTCCTGC AAAGAGTGTA TGAGTATTAG	10860

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TCGCAATCTG GCCGACTTTC AAATCTGGAC GAACATGGAG ACCATAGAAT TGATCTGGCA	10920
ACCAATCTCC AAAAGCACCG TCCTCATACA TGAGCATACC ACCAGCTTCA TTTTCTTCAG	10980
CAGGCTGAAA TAGAAAGAGC AGATTATTCT TGGGTGCTC CTCAAGGGCG CGCTCAAGAC	11040
AGCCTAAGGC AATGGTCATA TGAAAATCAT GGACACAGGC ATGCATGCCA CCTTGGTGTT	11100
GAGAAGCAAA AGGTAGACCT GTTTGTTCGA CGATAGGCAG GCCATCAATA TCTGTCCGCC	11160
AACCAATGGT TCGCTCCGGC TGACTTCCCT GCAGGTAGAC CAAAATCCCT GTCCGCCAAG	11220
TACGAATTTG AACAAAATCC TTGCCCCTAG TCAATTCTC AATCACATCC AGCAAATAAG	11280
CCTGAGTCTT GAACTCCTCC AAGCCAATCT CTGGAATCTG GTGTAAATCT CGTCTAGTCT	11340
GAATCAAATC TAACATCTAT CTGTCTCCG ATATAGCAGA AAGAGGCTGG AAAAAGGGTT	11400
CCGCCTCTTT TTTACTTTTA CAATTACAAG GTACGAAGCG CATCCTCTAG CGCTGTTTTT	11460
TGTTGAGTTT GGGCATCAAT TTCTTTGATA ATACGAGCTG GAACACCTGC TACTACCACG	11520
TTTTCTGGGA CATCTGGGT AACAATAGCT CCTGTGCGA CAACTGAACC ACTACCGATT	11580
TGGACTCCTT CGATAACCAC TGCATTAGCA CCGATAAGAA CATTGTCTCC GACACGACT	11640
GGTTCAGCAC TAGCTGGCTC AATCACACCT GCCAAAATG CACCTGCACC AACGTGGCTA	11700
TTTTTTCCAA CGATGGCACG GCCACCAAGG ATGGCACCCA TGTCAATCAT GGTTCAGCA	11760
CCGATTTTCA CACCGATATT GATAACAGAT CCCATCATGA TAACAGCATT GTCACCAATT	11820
TCCACCTGGT CACGGATAAT CGCACCTGGC TCGATACGAG CGTTGATAGC ACGCTTATCT	11880
AGCAAAGGAA CTGCAGAATT ACGAGCATCT TGCTCGACAA CATAATCTTG ATTTTCTACC	11940
AAACCTTCAA GAAGCGGAGC CACATCCTTC CAGTCTCCGA ATAGGACATT TCCTAGTTTG	12000
ACAACAGAGC TAGGCACAGC AGTTGCGAGT TGCCCCCTAA AGGTTACTTT GACACTGGTT	12060
TTCTTTTCAG CATTGGCGAT AAATTGGATA ATTTCTTGAG CGTTCATTTT TGTCAGCAGTC	12120
ATAGGTG	12127

## (2) INFORMATION FOR SEQ ID NO: 149:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 12566 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 149:

CCATCCTTCT GTTGATGTGA CAGGAATGAT GATAAATCAA CCAGTAGCTA GTCGCGAAGA	60
GGTGACAGAG GCTTTGAGTC ACTTGGCGGT AGAGACAAT AGTCTCATTG CTCGTCGAAT	120